TITLE V OPERATING PERMIT

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA) and pursuant to the Code of Federal Regulations (CFR), Title 40, Part 70.

Title V Permit Number	213-0081-TV
Client/ Sequence /Town/Premises Numbers	130 / 04 / 213 / 02
Date Issued	February 10, 2004
Expiration Date	February 10, 2009

Corporation:

Hamilton Sundstrand Corporation – A UTC Company

Premises Location:

One Hamilton Road, Windsor Locks, CT 06096

Name of Responsible Official and Title:

Tony M. Flippo, Director, Operations

All the following attached pages, 2 through 74, are hereby incorporated by reference into this Title V Operating Permit.

ARTHUR J. ROCQUE, JR.
Arthur J. Rocque, Jr.
Commissioner

2/10/04
Date

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LIST OF ACRONYMS

Acronym	*Description*
acfm	Actual cubic feet per minute
ASC	Actual Stack Concentration
AOS	Alternative Operating Scenario
CAA	Clean Air Act
cf	Cubic feet
CGS	Connecticut General Statutes
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DERC	Discrete Emission Reduction Credit
dscm	Dry Standard Cubic Meter
dscf	Dry Standard Cubic Meter
EMU	Emission Unit
EPA	Environmental Protection Agency
^{o}F	Degrees Farenheight
FLER	Full load emission rate
gal	Gallon
GEMU	Grouped Emission Unit
gr	Gram
HAP	Hazardous Air Pollutant
HLV	Hazard Limiting Value
hr	Hour
HSC	Hamilton Sundstrand Corporation
ITT	Intent To Test
kg	Kilogram
LAER	Lowest Achievable Emission Rate
lb	Pound
m	Meter
MASC	Maximum Allowable Stack Concentration
mg	Milligrams
MMBTU	Million British Thermal Unit
MSDS	Material Safety Data Sheet
:g/m^3	Milligrams per Cubic Meter
NATS	NO_x Allowance Tracking System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	Nitrogen Oxides
NSR	New Source Review
PM-10	Particulate Matter (10 microns and less)
ppmv	Parts per million, volumetric basis
RACT	Reasonably Available Control Technology
RCSA	Regulations of Connecticut State Agencies
SIC	Source Identification Code
SO_x	Sulfur Oxides
SOS	Standard Operating Scenario
TPY	Tons per year
TSP	Total Suspended Particulate
VOC	Volatile Organic Compound
yr	Year

Title V Operating Permit

All conditions in Sections III, IV, VI and VII of this Title V Operating Permit are enforceable by both the Administrator and the Commissioner unless otherwise specified. Applicable requirements and compliance demonstration are set forth in Section III of this Title V Operating Permit. The Administrator or any citizen of the United States may bring an action to enforce all permit terms or conditions or requirements contained in Sections III, IV, VI and VII of this Title V Operating Permit in accordance with the Clean Air Act (CAA), as amended.

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business:	Manufacturer of aircraft and spacecraft control systems and components
Primary SIC:	3728
Other SIC:	none
Facility Mailing Address:	One Hamilton Road, Windsor Locks, CT 06096
Telephone Number:	860-654-6000

B. PREMISES DESCRIPTION

Hamilton Sundstrand Corporation, A United Technologies Company (HSC) designs and manufacturers aircraft and spacecraft control systems and components for the aerospace and marine industries at their Windsor Locks facility.

HSC has a number of pieces of registered and permitted fuel burning equipment, along with fuel burning equipment that is not required to be registered or permitted. These units include propane fired heating units, natural gas heating units, diesel emergency engines, oil and natural gas fired boilers, and two engine test cells.

The six registered natural gas and oil fired boilers are subject to Consent Order #7019A and Consent Order #8109. The two test cells are also subject to Consent Order #7019A.

HSC has multiple open-top vapor degreasers, stills, and handwiping activity which are subject to Consent Order #8029 and Regulations of Connecticut State Agencies (RCSA) §22a-174-20(l). One vapor degreaser is also subject to the Halogenated Solvent NESHAP, 40 CFR Part 63 Subpart T. There are also cold cleaning units which are subject to RCSA §22a-174-20(l) and flush and test rigs which are subject to RCSA §22a-174-20(f).

HSC's surface coating operations consists of various permitted spray booths and spray booths not required to be permitted. HSC also has multiple grinding operations, aqueous cleaning systems, injection molding units, open top vapor degreasers and insta-pak machines that are not required to be permitted.

HSC has two plating lines that are subject to the NESHAP for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, 40 CFR Part 63 Subpart N.

Units whose only applicable requirements were either RCSA §22a-174-18 (TSP) or RCSA §22a-174-29 (HAPs), and were not registered or permitted, were not included in sections II & III of this Title V Operating Permit but are still subject to those requirements since they are included in Section V, State Enforceable Terms and Conditions, of this Title V Operating Permit.

HSC has multiple fuel storage tanks, lab hoods and other various insignificant sources which have potential emissions less than 1 ton per year for any individual pollutant and also have no applicable requirements. These units were not included in this Title V Operating Permit pursuant to RCSA §22a-174-33(j)(1)(F)(ii).

Section II: Emissions Units Information

A. EMISSIONS UNITS INFORMATION

Emission units are set forth in Table II.A.1.

TABLE II.A.1: EMISSIONS UNIT IDENTIFICATION

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit (P), Order (O), Registration (R), or Regulation (RCSA) Number*
GEMU-001	EMU-001	Hot Air Furnace H	None	R #65
	EMU-002	Hot Air Furnace G	None	R #64
GEMU-002	EMU-003	BLR CB 760-500 B3 #1	None	R #60, O #7019A, O #8109
	EMU-004	BLR CB 760-500 B3 #2	None	R #59, O #7019A, O #8109
	EMU-005	BLR Riley #1	Low-NO_x Burner	R #52, O #7019A, O #8109
	EMU-006	BLR Riley #2	Low-NO_x Burner	R #53, O #7019A, O #8109
	EMU-007	BLR Riley #3	Low-NO_x Burner	R #54, O #7019A, O #8109
	EMU-008	BLR C.E. #4	None	R #55, O #7019A, O #8109
	EMU-009	Test Cell D	None	R #94, O #7019A

Section II: Emissions Units Information

TABLE II.A.1: EMISSIONS UNIT IDENTIFICATION, continued

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit (P), Order (O), Registration (R), or Regulation (RCSA) Number*
	EMU-010	Test Cell E	None	P# 213-0047, O #7019A
GEMU-003	EMU-011	Cummins NT855-G5 200kW Emergency Generator	None	RCSA §22a-174-3b(e)
	EMU-012	Onan/Cummins KTA10-G4 500kW Emergency Generator	None	RCSA §22a-174-3b(e)
	EMU-013	Props Spray Booth	Particulate Filter	P #213-0038
	EMU-014	Heat Exchanger Coating Facility	Particulate Filter	P #213-0043
	EMU-015	SLS Coating Facility	Particulate Filter	P #213-0044
GEMU-004	EMU-016	SLS Carbon Collector Coating Operation	None	RCSA §22a-174-3b(g)
	EMU-017	SLS Paint Spray Booth	None	RCSA §22a-174-3b(g)
	EMU-018	Spinner Booth	None	RCSA §22a-174-3b(g)
	EMU-019	Binks Spray Booth #1	Particulate Filter	P# 213-0085
	EMU-020	Binks Spray Booth #2	Particulate Filter	P# 213-0086

Section II: Emissions Units Information

TABLE II.A.1: EMISSIONS UNIT IDENTIFICATION, continued

Emissions Unit		Emissions Unit Description	Control Unit Description	Permit (P), Order (O), Registration (R), or Regulation (RCSA) Number*
GEMU-005	EMU-021	E63931 Open Top Vapor Degreaser (HFC/VOC Blend) 74 gal	None	O #8029
	EMU-022	E18141 Open Top Vapor Degreaser (NPB) 98 gal	None	O #8029
	EMU-023	F0651 Still (HFC/VOC Blend) 77 gal	None	O #8029
GEMU-006	EMU-024	E45127 Still (Freon 113) 110 gal	None	O #8029
	EMU-025	F0652 Still (HFE Blend) 77 gal	None	O #8029
GEMU-007	EMU-026	E45172 Open Top Vapor Degreaser (Exempt VOC) 110 gal	None	O #8029, 40 CFR 63, Subpart T
	EMU-027	E45170 Open Top Vapor Degreaser (Exempt VOC) 220 gal	None	O #8029
GEMU-008	EMU-028	Handwiping Operations	None	O #8029
GEMU-009	EMU-029	Cold Cleaning Units	None	RCSA §22a-174-20(l)
GEMU-010	EMU-030	Flush and Test Rigs	None	RCSA §22a-174-20(f)
GEMU-011	EMU-031	Plating Line #3	Scrubber	40 CFR 63, Subpart N
	EMU-032	Plating Line #5	Scrubber	40 CFR 63, Subpart N

(*) It is not intended to incorporate by reference these NSR Permits, Orders, or Registrations into this Title V Operating Permit.

Section II: Emissions Units Information

The Permittee shall be allowed to operate under the following standard operating scenario (SOS) without notifying the Commissioner, provided that such operations are explicitly provided for and described in the table below. There are no Alternate Operating Scenarios (AOS) for the premises.

TABLE II.A.2: OPERATING SCENARIO IDENTIFICATION, SOS

Emissions Units Associated with the Scenarios	Description of Scenario
GEMU-001, EMU-003	The standard operation of three (3) propane fired furnaces is for simulating atmospheric conditions in order to test aerospace equipment.
GEMU-002	The standard operation of the six (6) boilers is to provide process and building heating and cooling steam.
EMU-009	The standard operation of Test Cell D is to test auxiliary power units.
EMU-010	The standard operation of Test Cell E is the testing of propeller systems and controls.
GEMU-003	The standard operation of the emergency engines is to provide emergency power for operations in the facility or maintenance purposes.
EMU-013	The standard operation of the paint booth is to apply coatings to aerospace parts.
EMU-014	The standard operation of this coating area is to apply coatings to heat exchangers.
EMU-015	The standard operation of these four (4) paint booths is to apply coatings to miscellaneous parts.
GEMU-004	The standard operation of these coating areas is to coat miscellaneous parts.
EMU-019	The standard operation of booth #1 is to apply coatings to miscellaneous parts.
EMU-020	The standard operation of booth #2 is to apply coatings to miscellaneous parts.
GEMU-005	The standard operation of two (2) vapor degreasers is to clean and remove soils from metal surfaces.
GEMU-006	The standard operation of the still is to clean solvent for reuse.
GEMU-006	The standard operation of two (2) vapor degreasers is to clean and remove soils from metal surfaces.
GEMU-007	The standard operation of two (2) vapor degreasers is to clean and remove soils from metal surfaces.
GEMU-008	The standard operation of handwiping operations is to clean and remove soils from metal surfaces, instrumentation or facility equipment.
GEMU-009	The standard operation of cold cleaning units is to clean and remove soils from metal surfaces, instrumentation or facility equipment.

TABLE II.A.2: OPERATING SCENARIO IDENTIFICATION, SOS	
Emissions Units Associated with the Scenarios	**Description of Scenario**
GEMU-010	The standard operation of the flush rigs and test rigs is to test functionality and remove soils from metal surfaces of uninstalled parts, instrumentation or facilities equipment.
GEMU-011	The standard operation of the two (2) plating lines is to perform hard chromium plating and chromium anodize onto metal surfaces.

Section III: Applicable Requirements and Compliance Demonstration

The following tables contain summaries of applicable terms and conditions set forth in state and federally enforceable permits, statutes, and/or regulations for the operation of each identified Emissions Unit and Operating Scenario, regulated by this Title V Operating Permit. Note: All conditions set forth in Section III of this Title V Operating Permit are federally enforceable.

A. GROUPED EMISSIONS UNIT GEMU-001 (EMU-001 – EMU-002 – Propane Fired Furnaces/Heaters)

Table III.A: GEMU-001 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
TSP	Less than or equal to 0.20 lb/MMBTU when firing propane	RCSA ə22a-174-18(d)(1)	A.1

Compliance Demonstration

A.1. TSP: Emissions of TSP shall not exceed those limits in condition A.1, Table III.A of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall demonstrate compliance by calculating the emission rate of each unit using EPA emission factors or emission factors provided by the manufacturer. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)]

b. Record Keeping Requirements

The Permittee shall maintain records of the calculations required in Section III.A.1.a of this Title V Operating Permit to demonstrate compliance with Condition A.1, Table III.A of this Title V Operating Permit. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

B. GROUPED EMISSIONS UNIT GEMU-002 (EMU-003 – EMU-008 – Natural Gas and Fuel Oil Fired boilers)

Table III.B: GEMU-002 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Boiler Operation	Permittee shall not operate more than three of the following boilers simultaneously: EMU-005, EMU-006, EMU-007, EMU-008	O #7019A	B.1
Allowable Fuels	Natural gas or No. 2 fuel oil with sulfur content not exceeding 0.3% by weight, dry basis in EMU-003 and EMU-004	O #7019A	B.2
	Natural gas, No. 2 fuel oil with sulfur content not exceeding 0.3% by weight, dry basis, or No. 4 or No. 6 fuel oil with a sulfur content not exceeding 1.0% by weight, dry basis in EMU-005, EMU-006 and EMU-007	O #7019A	
	No. 2 fuel oil with sulfur content not exceeding 0.3% by weight, dry basis, or No. 4 or No. 6 fuel oil with a sulfur content not exceeding 1.0% by weight, dry basis in EMU-008	O #7019A	

Table III.B: GEMU-002 – Applicable Requirements, continued

<table>
<tr><th>Pollutants or Process Parameters</th><th>Limitations or Restrictions</th><th>Applicable Regulatory References/ Citations</th><th>Compliance Demonstration Condition Number</th></tr>
<tr><td rowspan="3">NOx Discrete Emission Reduction Credits (DERCs)</td><td>a. The Permittee and approved sources within Connecticut shall be allowed to use 17 tons (8 tons ozone and 9 tons non-ozone season) of NOx DERCs as shown in Table III.B.1 of this Title V Operating Permit. These DERCs may be used for the purposes of compliance under RCSA §22a-174-22(j), to achieve a portion of the nitrogen oxide emission reductions required.

Table III.B.1
Approved DERCs Generated from 1999 through 2002
(After rounding down to the nearest whole ton)<table><tr><th>Year of Gener-ation</th><th>Ozone Season</th><th>Tons</th><th>Non-Ozone Season</th><th>Tons</th><th>Expiration Date</th></tr><tr><td>1999</td><td>CT99/8109(DC)NOxoz(1-2)</td><td>2</td><td>CT99/8109(DC)NOxnoz(1)</td><td>1</td><td>12/31/04</td></tr><tr><td>2000</td><td>CT00/8109(DC)NOxoz(1-2)</td><td>2</td><td>CT00/8109(DC)NOxnoz(1-4)</td><td>4</td><td>12/31/05</td></tr><tr><td>2001</td><td>CT01/8109(DC)NOxoz(1)</td><td>1</td><td>CT01/8109(DC)NOxnoz(1)</td><td>1</td><td>12/31/06</td></tr><tr><td>2002</td><td>CT02/8109(DC)NOxoz(1-3)</td><td>3</td><td>CT02/8109(DC)NOxnoz(1-3)</td><td>3</td><td>12/31/07</td></tr></table></td><td>O #8109</td><td rowspan="3">B.3</td></tr>
<tr><td>b. The Permittee shall comply with RCSA §22a-174-22(d)(1) through use of DERC trading and upon sufficient documentation generate additional DERCs. Upon issuance of an addendum to Order #8109, the Commissioner may approve the generation of additional DERCs by the Permittee retrospectively. Approved DERCs created by the Permittee may be held by the Permittee or transferred to other persons in accordance with Order #8109.</td><td>O #8109</td></tr>
<tr><td>c. The Permittee shall be allowed to generate approved DERCs as allowed under Order #8109 until April 30, 2007.</td><td>O #8109</td></tr>
</table>

Table III.B: GEMU-002 – Applicable Requirements, continued

<table>
<tr><th>Pollutants or Process Parameters</th><th>Limitations or Restrictions</th><th>Applicable Regulatory References/ Citations</th><th>Compliance Demonstration Condition Number</th></tr>
<tr><td rowspan="4">NOx Discrete Emission Reduction Credits (DERCs), continued</td><td>d. The Permittee shall comply with RCSA §22a-174-22 through emission reduction trading until the Permittee achieves permanent compliance with the emissions standard in RCSA §22a-174-22(e) or by April 30, 2007 whichever is earlier:

i. The Permittee shall use approved DERCs as required under Order #8109;

ii. The Permittee shall have in its possession sufficient approved DERCs to meet applicable NOx emission limits as allowed under Order #8109; and

iii. The Permittee shall comply during the operation of EMU-008 with a use FLER of 0.42 lbs/MMBTU when using DERCs and with the generation FLERs shown in Table III.B.2 of this Title V Operating Permit when generating credits in EMU-005, EMU-006 and EMU-007 in accordance with Order #8109.

Table III.B.2 – Generation FLERs
<table><tr><th>EMU #</th><th>Fuel</th><th>Generation FLER</th></tr><tr><td rowspan="2">EMU-005</td><td>#6 oil</td><td>N/A</td></tr><tr><td>Natural Gas</td><td>0.13</td></tr><tr><td rowspan="2">EMU-006</td><td>#6 oil</td><td>N/A</td></tr><tr><td>Natural Gas</td><td>0.09</td></tr><tr><td rowspan="2">EMU-007</td><td>#6 oil</td><td>N/A</td></tr><tr><td>Natural Gas</td><td>0.14</td></tr></table></td><td>O #8109</td><td rowspan="4">B.3 continued</td></tr>
<tr><td>e. The Permittee, when operating on natural gas, may generate DERCs using emission reductions from EMU-005, EMU-006 and EMU-007.</td><td>O #8109</td></tr>
<tr><td>f. The Permittee shall, until April 30, 2007, have in its possession sufficient approved DERCs for each month for EMU-008 before the first day of such month.</td><td>O #8109</td></tr>
<tr><td>g. The Permittee shall, until and on April 30, 2007, comply during operation of EMU-008 to a maximum capacity of 63 MMBTU/hr heat input or 51,500 lbs/hr steam output averaged on a 24-hour basis.</td><td>O #8109</td></tr>
</table>

Table III.B: GEMU-002 – Applicable Requirements, continued

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
NOx Discrete Emission Reduction Credits (DERCs), continued	h. The Permittee may use NOx allowances, through April 30, 2007, pursuant to RCSA §22a-174-22(j) to achieve all or a portion of the reductions required by RCSA §22a-174-22. Any allowance used for compliance with RCSA §22a-174-22(e) shall be subject to all restrictions and/or requirements applicable to DERCs contained in Order #8109; i. In order for the Permittee to use NOx allowances, the Permittee shall create a general account in EPA's NOx Allowance Tracking System ("NATS"); and ii. Each allowance used for compliance with RCSA §22a-174-22 shall be equivalent to one (1) discrete emission reduction credit. Allowances shall be considered used for compliance with RCSA §22a-174-22 when they are transferred from the facility's NOx general account in the NATS to the CT State NOx Retirement Account (Account ID CT0000000300 in the NATS).	O #8109	B.3 continued
	i. At a minimum, DERCs required shall be adjusted upwards by 100% if DERCs are not in the Permittee's possession prior to the first day of each month for use. However, based on the gravity of noncompliance, the Commissioner may require additional upward adjustment.	O #8109	
	j. DERCs/allowances shall only remain valid for five (5) calendar years from the year of the generation/allocation of such DERCs/allowances. DERCs/allowances older than five (5) calendar years from their creation/allocation are not valid for use for compliance with RCSA §22a-174-22. Notwithstanding the above, DERCs/allowances generated/allocated prior to calendar year 2000 are valid for use for compliance with RCSA §22a-174-22 up to and including December 31, 2004.	O #8109	
	k. No later than April 30, 2007 for EMU-003, EMU-004, EMU-005, EMU-006, EMU-007 and EMU-008, the Permittee shall comply with the requirements in RCSA §22a-174-22(d)(1). However, after full program review of Order #8109 and other Trading Agreements and Orders and if determined to be appropriate, the Commissioner may grant written extension of Order #8109.	O #8109	

Compliance Demonstration

B.1. Boiler Operation: The Permittee shall comply with the requirements in condition B.1, Table III.B of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the start up and shut down times for boilers EMU-005, EMU-006, EMU-007 and EMU-008 to ensure compliance with condition B.1, Table III.B of this Title V Operating Permit. [O #7019A]

b. Record Keeping Requirements

The Permittee shall keep records of the start up and shut down times of the boilers EMU-005, EMU-006, EMU-007 and EMU-008. [O #7019A]

B.2. Allowable Fuels: The Permittee shall comply with the requirements in condition B.2, Table III.B of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the sulfur content of the fuels burned for each boiler in GEMU-002. [O #7019A]

b. Record Keeping Requirements

The Permittee shall keep records of vendor certification of fuel sulfur content for each delivery of fuel oil received. Or, in the event that it becomes necessary to obtain fuel from a vendor that cannot provide fuel sulfur certification, the Permittee may obtain and keep records of a fuel sulfur content analysis from an EPA certified lab, prior to use of such fuel. These records should also note the EMU in which the fuel is burned. [O #7019A]

c. Reporting Requirements

The Permittee shall submit to the Commissioner an annual report on or before the 31st of March of each year. The annual report shall contain all records required pursuant to Section III.B.2.b for the twelve (12) month period of January 1st through December 31st of the preceding year. [O #7019A]

B.3. NOx Discrete Emission Reduction Credits (DERCs): The Permittee shall comply with the requirements in condition B.3, Table III.B of this Title V Operating Permit.

a. Monitoring and Testing Requirements

i. The Permittee shall calculate DERCs generated using the appropriate emission rate(s) and generation FLER(s) set forth in the following table:

Table III.B.3 – NOx EMISSION TEST RATES AND LIMITS (lbs/MMBTU)

EMU #	Fuel	Heat Input	Test Rate 5/95	Test Rate 1/99	Test Rate 5/99 Lo-NOx	Test Rate 5/00	Use FLER	Gen. FLER	NOx Limit Rate	Date of Last Test	Date Next Test Due
EMU-005	#6 oil Nat Gas	61	0.38 0.26	N/A	0.25 0.12	N/A	N/A N/A	N/A 0.13	0.25 0.20	4/22/99	4/22/04
EMU-006	#6 oil Nat Gas	61	0.36 0.27	N/A	0.24 0.08	N/A	N/A N/A	N/A 0.09	0.25 0.20	4/23/99	4/23/04
EMU-007	#6 oil Nat Gas	61	0.40 N/A	N/A	0.25 0.13	N/A	N/A N/A	N/A 0.14	0.25 0.20	4/20/99	4/20/04
EMU-008	#6 oil	73	0.44	N/A	N/A	0.374	0.42	N/A	0.25	5/10/00	2/2/05
EMU-003	#4 oil #2 oil Nat Gas	20.9	0.29 N/A 0.08	Ceased 0.171 N/A	N/A	Ceased N/A 0.111	0.29 N/A N/A	N/A N/A N/A	0.25 0.20 0.20	5/11/00	1/15/04
EMU-004	#4 oil #2 oil Nat Gas	20.9	0.27 N/A 0.07	Ceased 0.189 N/A	N/A	Ceased N/A 0.102	0.27 N/A N/A	N/A N/A N/A	0.25 0.20 0.20	5/11/00	1/14/04

and in accordance with the following formula:

DERCs (tons) generated = {[(natural gas fuel use in MMBTU) x ((NOx allowable limit of 0.20 lbs/MMBTU) - (FLER in lbs/MMBTU))] ÷ 2000 lbs/ton} x (0.90)(0.90).

Where:

Allowable limit = allowable limit in lbs/MMBTU shown in Table III.B.3, Section III.B.3.a.i of this Title V Operating Permit.

Full load emission rate (FLER) for the appropriate boiler and generation = generation FLER from Table III.B.3, Section III.B.3.a.i of this Title V Operating Permit for natural gas.

Discount (0.90) (0.90) = A discount factor of ten (10) percent for the benefit of the environment and another ten (10) percent for the uncertainty of using one (1) emission test every five (5) years in lieu of CEMs, shall be applied to all DERCs (tons) as calculated on a monthly basis.

Fuel heating value = 1000 Btu/cf for natural gas. [O #8109]

ii. Until April 30, 2007, before the first day of each month, the Permittee shall have in its possession sufficient approved DERCs for such month for EMU-008 based on the following calculation:

The Permittee shall estimate DERCs required for such calendar month for EMU-008 when burning No. 6 fuel oil and using a FLER of 0.42 lbs/MMBTU as follows:

Estimated DERCs (tons) use = {(Estimated fuel use in MMBTU) x ((FLER) - (0.95 x NOx allowable emission limit))}÷2000 lbs/ton.

Where:

Allowable limit = allowable limit rate in lbs/MMBTU shown in Table III.B.3, Section III.B.3.a.i of this Title V Operating Permit.

Full load emission rate (FLER) for EMU-008 = 0.42 lbs/MMBTU

Discount (0.95) = 5% design margin applied to the allowable limit rate.

Fuel heating value = 152,000 Btu/gal for No. 6 fuel oil.

No later than the twentieth day of each month, calculate and permanently retire actual DERCs used in the preceding calendar month for EMU-008 when burning #6 fuel oil using the FLER as follows:

Actual DERCs (tons) used = {(actual fuel use in MMBTU) x ((FLER) - (0.95 x NOx RACT rate in lbs/MMBTU))}÷2000 lbs/ton. [O #8109]

iii. Noncompliance with an established FLER shall subject the Permittee to make restitution by matching the quantity of emissions ("true up") caused by the exceedance plus a 100% premium. The true up in tons of DERCs shall be equal to the FLER exceedance in lbs/MMBTU, multiplied by the total heat input during the period of noncompliance divided by 2000 lbs/ton. If the period of noncompliance is not known, the time period from the completion of the last/previous Department witnessed emission test through the date the FLER compliance is achieved as approved by the Commissioner shall be used. However, nothing in this Order #8109 shall affect the Commissioner's authority to institute any proceeding or take any other action to require additional upward adjustment, based on the gravity of any alleged noncompliance or violation of law. [O #8109]

iv. The Permittee shall conduct NOx emission tests of each unit in GEMU-002 at least once every five (5) years commencing from the dates of the NOx emission tests for the units as provided in Table III.B.3, Section III.B.3.a.i of this Title V Operating Permit. [O #8109]

v. If the Permittee has reason to believe it may be exceeding a use FLER limit for EMU-008 or the generation FLERs for EMU-005, EMU-006 and EMU-007 or exceeding the maximum capacity specified in condition B.3.g, Table III.B of this Title V Operating Permit, the Permittee shall conduct NOx emissions testing of the corresponding boiler on or before sixty (60) days after the exceedance of the above limits in accordance with Section B.3.v of this Title V Operating Permit. [O #8109]

vi. The Permittee shall submit to the Commissioner for his review and written approval an Intent-To-Test ("ITT") protocol not less than thirty (30) days prior to the emissions testing required pursuant to Section B.3.a.iv and B.3.a.v of this Title V Operating Permit. The ITT protocol shall include at least:

1. The Department's Bureau of Air Management Test Form No. 1, "Intent to Test";

2. System operating parameters indicative of the highest operating rate since the last previous stack test or the most recent Department witnessed emission test which ever is more recent, including, but not limited to: steam output rate, temperature and pressure, fuel firing rate, and NOx emissions rate; and

3. The ITT protocol shall provide that the Permittee shall perform testing as specified in RCSA §22a-174-5 and §22a-174-22, including operating EMU-008 at not less than ninety percent (90%) of its maximum rated capacity limit or highest operating rate since its last/previous emissions test, whichever is higher. [O #8109]

vii. The Permittee shall perform all testing required by Section B.3.a of this Title V Operating Permit in accordance with the approved ITT protocol. [O #8109]

viii. In conducting and performing the testing required by Section B.3.a of this Title V Operating Permit, and analyzing the results of such testing, the Permittee shall adhere to methods specified in RCSA §22a-174-5 and §22a-174-22 and as approved by the Administrator and the Commissioner. [O #8109]

ix. The Permittee shall schedule all emissions testing so as to allow the Commissioner to be present during such testing and to independently verify facility operations, air pollution control equipment parameters, and testing procedures. [O #8109]

b. <u>Record Keeping Requirements</u>

i. The Permittee shall make and keep records of:

A. daily fuel use and fuel type;
B. excess NOx emissions;
C. the number of DERCs in its possession, created, purchased and used (by serial number if assigned) each month in accordance with the appropriate emission rates and limits in Order #8109;
D. the number of DERCs used during the ozone season and non-ozone season (the remainder of the year); and
E. documentation attesting to the fact that approved DERCs used during the ozone season were generated during the ozone season. Generator certification of this fact shall be sufficient.

The Permittee shall maintain such records in accordance with RCSA §22a-174-22. [O #8109]

ii. The Permittee shall maintain records of steam output or gallons or cubic feet per hour of fuel, heat input per hour, to demonstrate that EMU-008 is operating at no greater than the maximum capacity as specified in condition B.3.g, Table III.B of this Title V Operating Permit. [O #8109]

c. Reporting Requirements

i. Requests for approval of all DERCs generated by the Permittee under Order #8109 shall be submitted in writing to the Commissioner. Such requests may be compiled on a monthly or seasonal basis and shall be submitted at least on an annual basis. Approved DERCs generated by the Permittee under Order #8109 may be held or transferred to other persons and shall remain valid until they are used or until their vintage expiration date, whichever occurs first. [O #8109]

ii. The Permittee shall provide documentation containing a sample spreadsheet with calculation formulas used to determine reported numbers, operating reports of actual monthly fuel usage including the fuel BTU content and number of cubic feet used in MMBTU, actual heat input based on monthly fuel use, actual NOx emissions, FLERs and DERCs generated for Order #8109, net of the environmental and uncertainty discounts when requesting approval of DERCs generated in accordance with Section B.3.a.i of this Title V Operating Permit. [O #8109]

iii. No later than March 1, of every year, the Permittee shall include with the Annual Emission Statement provided to the Commissioner, a record of each sale or other transfer, and use of any and all of the DERCs approved within and subsequent to issuance of Order #8109 until all such DERCs have been used. The Permittee shall also include NOx emissions from each boiler using or generating DERCs, and the amount of all DERCs used including serial number (if assigned) and approved DERCs generated and/or purchased from other facilities), generated and/or approved for the previous calendar year. These reports shall be on a form prescribed by the Commissioner and shall be in monthly increments. Should the Permittee choose to discontinue the generation of DERCs, the Permittee will notify the Commissioner upon discontinuance. [O #8109]

iv. On or before September 1, 2006, the Permittee shall submit a report indicating how the facility will comply with RCSA §22a-174-22 after April 30, 2007. [O #8109]

v. Within 30 days after completing any emissions testing required by Section B.3.a of this Title V Operating Permit, the Permittee shall submit to the Commissioner a written report providing the results of such testing; within fifteen (15) days of a notice from the Commissioner indicating any deficiencies in such report, the Permittee shall submit a revised report. [O #8109]

vi. Within fifteen (15) days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under Order #8109, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the Commissioner. [O #8109]

vii. In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of Order #8109 or of any document required hereunder, the Permittee shall immediately notify by telephone the individual identified in Order #8109 and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. Within five (5) days of the initial notice, the Permittee shall submit in writing the date, time, and duration of the noncompliance and the reasons for the noncompliance

or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates which may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing. [O #8109]

C. EMISSIONS UNIT EMU-009 (Test Cell D)

Table III.C: EMU-009 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Allowable Fuels	Jet-A or JP-5 fuel with sulfur content not exceeding 0.3% by weight, dry basis	O #7019A	C.1

Compliance Demonstration

C.1. Allowable Fuels: The Permittee shall comply with the requirements in condition C.1, Table III.C of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the type and sulfur content of the fuels burned in EMU-009. [O #7019A]

b. Record Keeping Requirements

The Permittee shall keep records of vendor certification of fuel type and sulfur content for each delivery of fuel oil received. Or, in the event that it becomes necessary to obtain fuel from a vendor that cannot provide fuel sulfur certification, the Permittee may obtain and keep records of a fuel sulfur content analysis from an EPA certified lab, prior to use of such fuel. These records should also note the EMU in which the fuel is burned. [O #7019A]

c. Reporting Requirements

The Permittee shall submit to the Commissioner an annual report on or before the 31st of March of each year. The annual report shall contain all records required pursuant to Section III.C.1.b of this Title V Operating Permit for the twelve (12) month period of January 1st through December 31st of the preceding year. [O #7019A]

D. EMISSIONS UNIT EMU-010 (Test Cell E)

Table III.D: EMU-010 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Allowable Fuels	Jet A, JP-4, JP-5, JP-8 and comparably formulated aviation turbine fuels not to exceed 0.3% sulfur by weight, dry basis	O #7019A, P #213-0047	D.1
Maximum Annual Fuel Consumption	Shall not exceed 217,000 gallons for all fuels combined	P #213-0047	D.2
Maximum Daily Fuel Consumption	May 1 through September 30: Shall not exceed 7,000 gallons October 1 through April 30: Shall not exceed 7,800 gallons	P #213-0047	D.3
Criteria Pollutant Maximum Allowable Emissions	Emissions shall not exceed: TSP 3.84 lb/hr, 0.09 lb/MMBTU, 1.28 TPY PM-10 3.84 lb/hr, 0.09 lb/MMBTU, 1.28 TPY SOx 13.70 lb/hr, -- lb/MMBTU, 4.57 TPY NOx 12.57 lb/hr, -- lb/MMBTU, 4.20 TPY VOC 14.95 lb/hr, -- lb/MMBTU, 5.00 TPY CO 10.63 lb/hr, -- lb/MMBTU, 3.55 TPY Pb 0.00254 lb/hr, -- lb/MMBTU, 0.0008 TPY	P #213-0047	D.4
Non-Criteria Pollutant Maximum Allowable Emissions	Shall not exceed Maximum Allowable Stack Concentrations for any pollutant listed in RCSA §22a-174-29	P #213-0047	D.5
Opacity	No greater than 20% over any five (5) consecutive minutes	P#213-0047	D.6

Compliance Demonstration

D.1. Allowable Fuels: The Permittee shall comply with the requirements in condition D.1, Table III.D of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the type and sulfur content of all fuels used. [P# 213-0047, O #7019A]

b. Record Keeping Requirements

The Permittee shall keep records of fuel shipping receipts and certifications. Each oil fuel shipment for EMU-010 shall include a shipping receipt from the fuel supplier and a certification from the fuel supplier verifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. [P# 213-0047, O #7019A]

c. Reporting Requirements

The Permittee shall submit to the Commissioner an annual report on or before the 31st of March of each year. The annual report shall contain all records required pursuant to Section III.D.1.b for the twelve (12) month period of January 1st through December 31st of the preceding year. [O #7019A]

D.2. Maximum Annual Fuel Consumption: The Permittee shall comply with the requirements in condition D.2, Table III.D of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor annual fuel consumption. Fuel consumption shall be monitored by the use of a fuel metering device to continuously monitor fuel feed to EMU-010. [P# 213-0047]

b. Record Keeping Requirements

The Permittee shall keep records of annual fuel consumption. Annual fuel consumption shall be based on any consecutive twelve (12) month time period and shall be determined by adding (for each fuel) the current month's fuel usage to that of the previous eleven (11) months. The Permittee shall make these calculations monthly. [P# 213-0047]

D.3. Maximum Daily Fuel Consumption: The Permittee shall comply with the requirements in condition D.3, Table III.D of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor daily fuel consumption. Fuel consumption shall be monitored by the use of a fuel metering device to continuously monitor fuel feed to EMU-010. [P# 213-0047]

b. Record Keeping Requirements

The Permittee shall keep records of daily fuel consumption. [P# 213-0047]

D.4. Criteria Pollutant Maximum Allowable Emissions: TSP, PM-10, SOx, NOx, VOC, CO, Pb
Emissions of TSP, PM-10, SOx, NOx, VOC, CO and Pb shall not exceed those limits in condition D.4, Table III.D of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the emission rates using emission factors from the following sources:

i. TSP, VOC, CO: AIRS dated March 1990 for SCC Code 20400102 Aircraft Engine Testing (turboshaft). Factor for TSP is 11.8 lbs/1000 gallons burned. VOC factor is 46.0 lbs/1000 gallons burned. CO factor is 32.7 lbs/1000 gallons burned.

ii. SOx: EPA FIRE version 6.2 and maximum sulfur content of 0.3% for an emission factor of 42 lbs/1000 gallons burned.

iii. NOx: EPA and DOT "Joint Report to Congress on the EPA-DOT Study of Nitrogen Oxide Emissions and their Control from Uninstalled Aircraft Engines in Enclosed Test Cells", dated September 1994, Table 3-4 "Predicted Emission Characteristics for a Turboprop/Turboshaft Model Test Cell", maximum factor of 5.5 lbs/thousand pounds of fuel, density of 845 kg/m^3.

Note that 1 gallon= 3.785 dm^3 and 1000 dm^3 =1 m^3.

iv. Pb: AP-42 section 3.1 "Stationary Gas Turbines for Electricity Generation", dated 10/96, Table 3.1-4, Trace Element Emission Factors for Distillate Oil-Fired Turbines (SCC 2-01-001-01). Factor is given as 5.8e-5 pounds per MMBTU. Assume 0.135 MMBTU/gallon unless otherwise documented.

The above statements shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with condition D.4, Table III.D of this Title V Operating Permit, as allowed by state or federal statute, law or regulation. [P# 213-0047]

b. Record Keeping Requirements

The Permittee shall verify compliance with the annual emission rates stated in condition D.4, Table III.D of this Title V Operating Permit by calculating emissions no later than fifteen (15) days after the end of each month. [P# 213-0047]

D.5. Non-Criteria Pollutant Maximum Allowable Emissions: The Permittee shall comply with the requirements in condition D.5, Table III.D of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by EMU-010. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)]

b. Record Keeping Requirements

The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by EMU-010. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

D.6. Opacity: The Permittee shall comply with the requirements in condition D.6, Table III.D of this Title V Operating Permit.

a. Monitoring and Testing Requirements

If required by the Commissioner, the Permittee shall measure opacity using Title 40 CFR Part 60, Method 9 stack test. [RCSA §22a-174-5(e)(2), 40 CFR §70.6(a)(3), & RCSA §22a-174-33(j)(1)(K)]

b. Record Keeping Requirements

The Permittee shall maintain records of the opacity tests required in Part III.D.6.a of this Title V Operating Permit. Such records shall include the dates, times, and places of all visible emission observations, persons performing the observations, test methods used, the operating conditions at the time of observation, and the results of such observation. [RCSA §22a-174-4(c)(1)]

E. GROUPED EMISSIONS UNIT GEMU-003 (EMU-011 – EMU-012 – Diesel Emergency Generators)

Table III.E: GEMU-003 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Maximum Operating Hours	Shall not exceed 500 hours during any twelve (12) month rolling aggregate	RCSA §22a-174-3b(e)(2)(A)	E.1
Maximum Fuel Sulfur Content	Shall not exceed 0.3% by weight, dry basis for any non-gaseous fuel consumed	RCSA §22a-174-3b(e)(2)(B)	E.2

Compliance Demonstration

E.1. Maximum Operating Hours: The Permittee shall comply with the requirements in condition E.1, Table III.E of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor hours of operation for each generator in GEMU-003 on a monthly basis. [RCSA §22a-174-3b(e)(4)]

b. Record Keeping Requirements

The Permittee shall maintain records of hours of operation for each generator in GEMU-003 on a monthly basis and a twelve (12) month rolling aggregate. Maximum annual operating hours shall be based on any consecutive twelve (12) month time period and shall be determined by adding each month's operating hours to that of the previous eleven (11) months for each generator in GEMU-003. [RCSA §22a-174-3b(e)(4)]

E.2. Maximum Fuel Sulfur Content: The Permittee shall comply with the requirements in condition E.2, Table III.E of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the sulfur content for the fuel burned in each generator in GEMU-003. [RCSA §22a-174-3b(e)(3)]

b. Record Keeping Requirements

The Permittee shall keep records of the fuel certification for each delivery of fuel from a bulk petroleum provider for each generator in GEMU-003. The shipping receipt shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [RCSA §22a-174-3b(e)(3)]

F. EMISSIONS UNIT EMU-013 (Props Spray Booth)

Table III.F: EMU-013 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Maximum VOC Content of Coatings	No greater than 7.08 lb/gal, as applied	P# 213-0038	F.1
Maximum Hourly Coating Usage	No greater than 3.0 gal/hr, as applied	P# 213-0038	
Minimum Transfer Efficiency	No less than 65%	P# 213-0038	F.2
Minimum PM Removal Efficiency	No less than 99%	P# 213-0038	
Criteria Pollutant Maximum Allowable Emissions	Emissions shall not exceed: lb/hr / TPY TSP 0.088 / 0.006 VOC 18.030 / 2.000	P# 213-0038	F.3
Hazardous Air Pollutants (HAPs)	The Permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA §22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the Permittee ensures that such emission complies with the applicable MASC.	P# 213-0038	F.4

Compliance Demonstration

F.1. Maximum VOC Content of Coating and Maximum Hourly Coating Usage: Maximum VOC content of coating and maximum hourly coating usage shall not exceed those limits in condition F.1, Table III.F of this Title V Operating Permit.

a. Monitoring and Testing Requirements

i. The Permittee shall monitor the usage of coatings, paints, thinners and cleaners used in EMU-013 through records of material usage. [P# 213-0038]

ii. The Permittee shall post, maintain and keep clearly visible at all times, in both the paint blending and spray booth areas, legible signs which clearly specify the allowable gallon per hour application rates. [P# 213-0038]

b. Record Keeping Requirements

i. The Permittee shall maintain daily records for all coatings and diluents used. Such records shall include:

A. Date paint used;
B. Description of paint, including name and density (lb/gal);

C. VOC content, as applied by weight (lb/gal);
D. Water and exempt VOC content by weight;
E. Non-volatile content by volume and weight;
F. Quantity of paint used (gal/day); and
G. Quantity of diluent used for each paint (lb, gallons). [P# 213-0038]

ii. The Permittee shall maintain an annual record of the type and quantity of any solvent used to clean the gun and booth. In addition, accurate annual records must be kept of the quantity and type of solvents spilled, evaporated, or manifested as waste material. [P# 213-0038]

iii. The Permittee shall maintain, on site, usage records of this booth and material safety data sheets for each paint and solvent used and submit such records to the Commissioner upon request. Material safety data sheets or technical data sheets must include the quantity and type of each hazardous air pollutant contained in the paint or solvent. [P# 213-0038]

F.2. Minimum Transfer Efficiency and Minimum PM Removal Efficiency: Minimum transfer efficiency and minimum PM removal efficiency shall comply with those limits in condition F.2, Table III.F of this Title V Operating Permit.

a. <u>Monitoring and Testing Requirements</u>

This source shall comply with any stipulation and recommendations set by the manufacturer for maintaining and operating the spray gun, spray booth, and particulate filter in order to achieve their guaranteed transfer and capture efficiencies. The control equipment shall be in place at all times. In addition, methods used to increase transfer efficiency shall include, but not be limited to, the following:

i. Minimize the distance from the spray gun to the object being coated;
ii. Minimize the air velocity in the spray booth (but not below health-based requirements); and
iii. Keep the atomizing air pressure to a minimum level, as recommended by the spray gun manufacturer. [P# 213-0038]

b. <u>Record Keeping Requirements</u>

The Permittee shall maintain records of the manufacturer's written recommendations and specifications and records of the manufacturer's guaranteed transfer and capture efficiencies. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

F.3. Criteria Pollutant Maximum Allowable Emissions: Criteria pollutant maximum allowable emissions shall not exceed those limits in condition F.3, Table III.F of this Title V Operating Permit.

a. <u>Monitoring and Testing Requirements</u>

i. The Permittee shall calculate the emission rates using emission factors from the following sources:

A. Material Balance; and
B. HVLP spray gun having an overall transfer efficiency of 65% and filters/waterwall having a control efficiency of 99%.

This shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the emission limits in condition F.3, Table III.F of this Title V Operating Permit, as allowed by state or federal statute, law or regulation. [P# 213-0038]

ii. The Permittee shall cover all open drums and vessels that contain solvents, cleaners, coatings, or cleaning rags so as to minimize the amount of VOCs emitted to the atmosphere. Empty containers shall be disposed of in a manner consistent with handling techniques for hazardous materials, as applicable. [P# 213-0038]

b. Record Keeping Requirements

The Permittee shall keep records of daily and twelve (12) month average VOC emissions. The twelve (12) month record of VOC emissions shall be determined by adding the current month's record to that of the previous eleven (11) months. These calculations shall be made on a monthly basis. Daily records shall clearly display, at a minimum, compliance with all emissions limitations set forth in condition F.3, Table III.F of this Title V Operating Permit. [P# 213-0038]

c. Reporting Requirements

The Permittee shall submit reports of any exceedances of the material usage or emission limitations to the Department in writing within thirty (30) days of the date of such exceedance. Such report shall at a minimum, include a description of the nature of the exceedance, the steps taken to reestablish compliance and the success of such steps, and the steps taken to assure that compliance is maintained in the future. [P# 213-0038]

F.4. Hazardous Air Pollutants (HAPs): Hazardous Air Pollutant emissions shall comply with the limit in condition F.4, Table III.F of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC.

The MASC shall be calculated using the following equation:

MASC = 973.6 * HLV * (5-4((T-0.5)/7.5))

where:

MASC= Maximum Allowable Stack Concentration ($\mu g/m^3$ or ppmv)
973.6 = Constant based on stack parameters
HLV = Hazard limiting value ($\mu g/m^3$ or ppmv)
T = The cumulative hours of operation in an 8 hour period, not to exceed 8 hours

The ASC shall be calculated using the HAP content as applied (1b/gal), the maximum application rate (gal/hr) as a worst case, and any applicable controls. This gives actual stack emissions in lb/hr which can be converted to a concentration in $\mu g/m^3$ or ppmv. [P# 213-0038]

b. Record Keeping Requirements

The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by EMU-013. [P# 213-0038]

c. Reporting Requirements

The Permittee shall submit a report to the Commissioner of any changes in materials, which contain HAPs that are regulated under RCSA §22a-174-29, and a demonstration of compliance with the MASC within thirty (30) days of such changes. [P# 213-0038]

G. EMISSIONS UNIT EMU-014 (Heat Exchanger Coating Facliity)

Table III.G: EMU-014 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Maximum Annual Number of Parts to be Processed	Shall not exceed 1,200 miscellaneous metal parts	P# 213-0043	G.1
Maximum Annual VOC Emissions	Shall not exceed 1 ton	P# 213-0043	G.2
VOC	The Permittee shall cover all open drums and vessels that contain solvents, cleaners, or coatings. Empty containers shall be disposed of in a manner consistent with handling techniques for hazardous materials, if applicable.	P# 213-0043	
Minimum Particulate Control Efficiency	No less than 99%	P# 213-0043	G.3
Minimum Transfer Efficiency	No less than 35%	P# 213-0043	
Hazardous Air Pollutants	The Permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA §22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the Permittee ensures that such emission complies with the applicable MASC.	P# 213-0043	G.4

Compliance Demonstration

G.1. Maximum Annual Number of Parts to be Processed: Maximum annual number of parts to be processed shall not exceed those limits in condition G.1, Table III.G of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the monthly and annual number of parts processed for EMU-014. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)]

b. Record Keeping Requirements

The Permittee shall keep records of monthly and annual number of parts processed. Annual number of parts processed shall be based on any consecutive twelve (12) month time period and shall be determined by adding the current month's parts processed to that of the previous eleven (11) months. The Permittee shall make these calculations monthly. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

G.2. Maximum Annual VOC Emissions: Maximum annual VOC emissions shall not exceed those limits in condition G.2, Table III.G of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor annual VOC emissions for EMU-014. [213-0043]

b. Record Keeping Requirements

The Permittee shall maintain daily records of all coatings and diluents used in this coating system to determine VOC emissions on a daily, monthly, and twelve (12) consecutive month basis. Such records shall contain the following information:

i. Description of the coating, including coating name and coating density in pounds per gallon;
ii. VOC content by weight as applied using either Reference Method 24 or 24A as found in 40 CFR 60, Appendix A;
iii. Water and exempt volatile organic compound content by weight;
iv. Non-volatile content by volume and weight;
v. Amount of each coating used daily in gallons for spray booth;
vi. Volume of coating used per production unit including only the portion actually applied in the dip tank (total applied minus dripback);
vii. Total operating hours per day; and,
viii. Calculated daily, monthly, and 12 month consecutive VOC emissions from EMU-014, based on the information in parts i. through vii. of Section III.G.2.b, of this Title V Operating Permit. [P# 213-0043]

G.3. Minimum Particulate Control Efficiency and Minimum Transfer Efficiency: Minimum particulate control efficiency and minimum transfer efficiency shall not be less than those limits in condition G.3, Table III.G of this Title V Operating Permit.

a. Monitoring and Testing Requirements

This Permittee shall comply with any stipulation and recommendations set by the manufacturer for maintaining and operating the spray gun, spray booth, and dry filter in order to achieve their guaranteed transfer and capture efficiencies. The dry filter shall be in place at all times. In addition, methods used to increase transfer efficiency shall include, but not be limited to, the following:

i. Minimize the distance from the spray gun to the object being coated;
ii. Minimize the air velocity in the spray booth (but not below OSHA-required levels); and
iii. Keep the atomizing air pressure to a minimum level, as recommended by the spray gun manufacturer. [P# 213-0043]

b. Record Keeping Requirements

The Permittee shall maintain records of the manufacturer's written recommendations and specifications and records of the manufacturer's guaranteed transfer and capture efficiencies. [P# 213-0043]

G.4. Hazardous Air Pollutants (HAPs): Hazardous Air Pollutant emissions shall comply with the limit in condition G.4, Table III.G of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC.

The MASC for EMU-014 shall be calculated using the following equations:

Catch Basin:	MASC = 6,578 * HLV
Blowdown Exhaust:	MASC = 1,174 * HLV
Spray Booth:	MASC = 789 * HLV
Cure Oven #1:	MASC = 90,905 * HLV
Cure Oven #2:	MASC = 90,905 * HLV
Catch Basin #2:	MASC = 2,624 * HLV

where:

MASC= Maximum Allowable Stack Concentration ($\mu g/m^3$ or ppmv)
HLV = Hazard limiting value ($\mu g/m^3$ or ppmv)

The ASC shall be calculated using the HAP content as applied (1b/gal), the maximum application rate (gal/hr) as a worst case, and any applicable controls. This gives actual stack emissions in lb/hr which can be converted to a concentration in $\mu g/m^3$ or ppmv. [P# 213-0043]

b. Record Keeping Requirements

i. The Permittee shall make and keep records of the ASC and MASC calculations for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 and 29-3 emitted by this source. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

ii. The Permittee shall keep records of all coatings and mix ratios used, coating times, and MSDS's or technical data sheets. [P# 213-0043]

iii. The Permittee shall maintain annual records of premises HAP emissions to demonstrate that they do not qualify as a major source of federal HAPs emissions (i.e. < 25 TPY of federal HAPs in aggregate or < 10 TPY of any HAP, or less than any quantity established by the Administrator pursuant to 40 CFR Part 63), thereby excluding the source from the requirements of an affected source under 40 CFR Part 63 Subpart GG "Aerospace Manufacturing and Rework Facilities NESHAP". [P# 213-0043]

H. EMISSIONS UNIT EMU-015 (SLS Coating Facility)

Table III.H: EMU-015 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Maximum Hourly Coating Usage	No greater than 11.72 gal/hr, as applied per spray gun	P# 213-0044	H.1
Minimum Transfer Efficiency	No less than 35%	P# 213-0044	H.2
Minimum PM Removal Efficiency	No less than 97%	P# 213-0044	
Criteria Pollutant Maximum Allowable Emissions	Emissions shall not exceed: lb/day TPY VOC 8.22 1.5	P# 213-0044	H.3
VOC	The Permittee shall cover all open drums and vessels that contain solvents, cleaners, coatings, or cleaning rags so as to minimize the amount of VOCs emitted to the atmosphere. Empty containers shall be disposed of in a manner consistent with handling techniques for hazardous materials, as applicable	P# 213-0044	
Hazardous Air Pollutants (HAPs)	The Permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA §22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the Permittee ensures that such emission complies with the applicable MASC.	P# 213-0044	H.4

Compliance Demonstration

H.1. Maximum Hourly Coating Usage: Maximum hourly coating usage shall not exceed those limits in condition H.1, Table III.H of this Title V Operating Permit.

a. Monitoring and Testing Requirements

i. The Permittee shall monitor the usage of coatings, paints, thinners and cleaners used in EMU-015 through records of material usage. [P#213-0044]

ii. The Permittee shall post, maintain and keep clearly visible at all times, in both the paint blending and spray booth areas, legible signs which clearly specify the allowable gallon per hour application rates. [P# 213-0044]

b. Record Keeping Requirements

i. The Permittee shall maintain daily records for all coatings and diluents used. Such records shall include:

A. Date paint used;
B. Description of paint, including name and density (lb/gal);
C. VOC content by weight (lb VOC/gal);
D. Water and exempt VOC content by weight;
E. Non-volatile content by volume and weight;
F. Quantity of paint blended, delivered to the spray area, and used/applied (gal/day); and
G. Quantity of diluent used for each paint (lb, gallons). [P# 213-0044]

ii. The Permittee shall maintain an annual record of the type and quantity of any solvent used to clean the guns and booth. In addition, accurate annual records must be kept of the quantity and type of solvents spilled, evaporated, or manifested as waste material. [P# 213-0044]

iii. The Permittee shall maintain, on site, usage records of this booth and material safety data sheets for each paint and solvent used and submit such records to the Commissioner upon request. Material safety data sheets or technical data sheets must include the quantity and type of each hazardous air pollutant contained in the paint or solvent. [P# 213-0044]

H.2. Minimum Transfer Efficiency and Minimum PM Removal Efficiency: Minimum transfer efficiency and minimum PM removal efficiency shall comply with those limits in condition H.2, Table III.H of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall comply with any stipulation and recommendations set by the manufacturer for maintaining and operating the spray gun, spray booth, and particulate filter in order to achieve their guaranteed transfer and capture efficiencies. The control equipment shall be in place at all times. In addition, methods used to increase transfer efficiency shall include, but not be limited to, the following:

i. Minimize the distance from the spray gun to the object being coated;
ii. Minimize the air velocity in the spray booth (but not below health-based requirements); and
iii. Keep the atomizing air pressure to a minimum level, as recommended by the spray gun manufacturer. [P# 213-0044]

b. Record Keeping Requirements

The Permittee shall maintain records of the manufacturer's written recommendations and specifications and records of the manufacturer's guaranteed transfer and capture efficiencies. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

H.3. Criteria Pollutant Maximum Allowable Emissions: Criteria pollutant maximum allowable emissions shall not exceed those limits in condition H.3, Table III.H of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the emission rates using emission factors from the following sources:

i. Material Balance; and
ii. Airless spray gun having an overall transfer efficiency of 35% and filters/waterwall having a control efficiency of 97%.

This shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the emission limits in condition H.3, Table III.H of this Title V Operating Permit, as allowed by state or federal statute, law or regulation. [P# 213-0044]

b. Record Keeping Requirements

The Permittee shall keep records of daily and twelve (12) month average VOC emissions, as well as cumulative year-to-date paint usage and VOC emissions. The twelve (12) consecutive month record of VOC emissions shall be determined by adding the current month's record to that of the previous eleven (11) months. These calculations shall be made on a monthly basis. Daily records shall clearly display, at a minimum, compliance with all emissions limitations set forth in condition H.3, Table III.H of this Title V Operating Permit. [P# 213-0044]

c. Reporting Requirements

Reports of any exceedances of the emission limitations, set forth in condition H.3, Table III.H of this Title V Operating Permit, shall be submitted to the Commissioner in writing within thirty (30) days of the date of such exceedance. Such report shall at a minimum, include a description of the nature of the exceedance, the duration and magnitude of the exceedance, the steps taken to reestablish compliance and the success of such steps, and the steps taken to assure that compliance is maintained in the future. [P# 213-0044]

H.4. Hazardous Air Pollutants (HAPs): Hazardous Air Pollutant emissions shall comply with the limit in condition H.4, Table III.H of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC.

The MASC shall be calculated using the following equation:

MASC = 15,717 * HLV * (5-4((T-0.5)/7.5))

where:

MASC= Maximum Allowable Stack Concentration ($\mu g/m^3$ or ppmv)
15,717= Constant based on stack parameters
HLV = Hazard limiting value ($\mu g/m^3$ or ppmv)
T = the cumulative hours of operation in an 8 hour period, not to exceed 8 hours

The ASC shall be calculated using the HAP content as applied (1b/gal), the maximum application rate (gal/hr) as a worst case, and any applicable controls. This gives actual stack emissions in lb/hr which can be converted to a concentration in $\mu g/m^3$ or ppmv. [P# 213-0044]

b. Record Keeping Requirements

i. The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by EMU-015. [P# 213-0044]

ii. The Permittee shall maintain annual records of premises HAP emissions to demonstrate that they do not qualify as a major source of federal HAPs emissions (i.e. < 25 TPY of federal HAPs in aggregate or < 10 TPY of any HAP, or less than any quantity established by the Administrator pursuant to 40 CFR Part 63), thereby excluding the source from the requirements of an affected source under 40 CFR Part 63 Subpart GG "Aerospace Manufacturing and Rework Facilities NESHAP". [P# 213-0044]

c. Reporting Requirements

i. The Permittee shall submit a report to the Commissioner of any changes in materials, which contain hazardous air pollutants (HAP) that are regulated under RCSA §22a-174-29, and a demonstration of compliance with the MASC within thirty (30) days of such changes. [P# 213-0044]

ii. Reports of any exceedances of the emission limitations, set forth in condition H.3, Table III.H of this Title V Operating Permit, shall be submitted to the Commissioner in writing within thirty (30) days of the date of such exceedance. Such report shall at a minimum, include a description of the nature of the exceedance, the duration and magnitude of the exceedance, the steps taken to reestablish compliance and the success of such steps, and the steps taken to assure that compliance is maintained in the future. [P# 213-0044]

Section III: Applicable Requirements and Compliance Demonstration

I. GROUPED EMISSIONS UNIT GEMU-004 (EMU-016 – EMU-018 – Spray Booths)

Table III.I: GEMU-004 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Maximum VOC Content of any Coating Used	Shall not exceed 6.3 lb/gal, as applied	RCSA §22a-174-3b(g)(1)(A)	I.1
Maximum HAP Content of any Coating Used	Shall not exceed 6.3 lb/gal, as applied	RCSA §22a-174-3b(g)(1)(B)	
Maximum Annual Coating and Solvent Usage	Shall not exceed 3,000 gallons for each unit in GEMU-004	RCSA §22a-174-3b(g)(1)(C)	I.2

Compliance Demonstration

I.1. Maximum VOC Content and Maximum HAP Content of any Coating Used: Maximum VOC content and Maximum HAP content of any Coating Used shall not exceed those limits in condition I.1, Table III.I of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the VOC and HAP content per gallon of each coating and solvent used, as applied. [RCSA §22a-174-3b(g)(3)(B)]

b. Record Keeping Requirements

The Permittee shall keep records of the VOC and HAP content per gallon of each coating and solvent used, as applied. [RCSA §22a-174-3b(g)(3)(B)]

I.2. Maximum Annual Coating and Solvent Usage: Maximum Annual Coating and Solvent Usage for each unit in GEMU-004 shall not exceed the limit in condition I.2, Table III.I of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the annual coating and solvent usage for each unit in GEMU-004. [RCSA §22a-174-3b(g)(3)(A)]

b. Record Keeping Requirements

The Permittee shall keep records of the type and quantity of coating and solvent used, in gallons, for each month and each twelve (12) month rolling aggregate. [RCSA §22a-174-3b(g)(3)(A)]

J. EMISSIONS UNIT EMU-019 (Binks Spray Booth #1)

Table III.J: EMU-019 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Maximum VOC Content of Coating	Shall not exceed 7.18 lb/gal, as applied	P# 213-0085	J.1
Minimum Particulate Control Efficiency	No less than 99.5%	P# 213-0085	J.2
Criteria Pollutant Maximum Allowable Emissions	Emissions shall not exceed: PM 0.0257 lb/hr 0.013 TPY VOC 7.86 lb/hr 2.00 TPY Pb 0.0001 lb/hr 0.00005 TPY	P# 213-0085	J.3
Hazardous Air Pollutants (HAPs)	The Permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA §22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the Permittee ensures that such emission complies with the applicable MASC.	P# 213-0085	J.4

Compliance Demonstration

J.1. Maximum VOC Content of Coating: Maximum VOC content of coating shall not exceed those limits in condition J.1, Table III.J of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the usage of coatings, paints, thinners and cleaners used in EMU-019 through records of material usage. [P#213-0085]

b. Record Keeping Requirements

The Permittee shall keep daily records of all coating used in this booth. Such records shall contain the following information:

i. Date paint used;
ii. Description of the paint, including name and density (lb/gal);
iii. VOC content by weight, as applied (lb VOC/gal);
iv. Water and exempt VOC content by weight;
v. Non-volatile content by volume and by weight;
vi. Quantity of paint used (lb/hr);
vii. Quantity of diluent used for each paint (lb, gallons); and

viii. Type of material being coated (metal or non-metal). [P# 213-0085]

J.2. Minimum Particulate Control Efficiency: Minimum particulate control efficiency shall comply with those limits in condition J.2, Table III.J of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the operation of this source to ensure that the particulate control used is installed, maintained and operated in accordance with manufacturer's specifications to achieve the manufacturer's guaranteed control efficiency. [P#213-0085]

b. Record Keeping Requirements

The Permittee shall keep a record of the manufacturer's specifications for installation, maintenance, and operation of the particulate control equipment. The record shall also include the manufacturer's guaranteed control efficiency. [P#213-0085]

J.3. Criteria Pollutant Maximum Allowable Emissions: Criteria pollutant maximum allowable emissions shall not exceed those limits in condition J.3, Table III.J of this Title V Operating Permit.

a. Monitoring and Testing Requirements

i. The Permittee shall calculate the emission rates using emission factors from the following sources:

A. Data obtained from the facility in the previous two (2) years; and
B. Mass balance and Material Safety Data Sheets (MSDS).

This shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the emission limits in condition J.3, Table III.J of this Title V Operating Permit, as allowed by state or federal statute, law or regulation. [P# 213-0085]

ii. The Permittee shall operate and maintain the spray booth, spray gun(s), and particulate filter according to the manufacturer's specifications in order to achieve the guaranteed transfer efficiency. Maintenance shall include, but not be limited to, the following:

A. Minimize the distance from the spray gun to the object to be coated;
B. Minimize the air velocity in the spray booth (but not below health-based requirements); and
C. Keep the atomizing air pressure at a minimum level as recommended by the manufacturer. [P#213-0085]

b. Record Keeping Requirements

The Permittee shall keep records of daily and annual VOC emissions. Annual VOC emissions shall be based on any consecutive twelve (12) month time period and shall be determined by adding the current month's VOC emissions to that of the previous eleven (11) months. The Permittee shall make these calculations within thirty (30) days of the end of the previous month. [P# 213-0085]

J.4. Hazardous Air Pollutants (HAPs): Hazardous Air Pollutant emissions shall comply with the limit in condition J.4, Table III.J of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by EMU-019. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC.

The MASC shall be calculated using the following equation:

MASC = 1,580 * HLV * (5-4((T-0.5)/7.5))

where:
MASC= Maximum Allowable Stack Concentration ($\mu g/m^3$ or ppmv)
1,580 = Constant based on stack parameters
HLV = Hazard limiting value ($\mu g/m^3$ or ppmv)
T = the cumulative hours of operation in an 8 hour period, not to exceed 8 hours

The ASC shall be calculated using the HAP content as applied (1b/gal), the maximum application rate (gal/hr) as a worst case, and any applicable controls. This gives actual stack emissions in lb/hr which can be converted to a concentration in $\mu g/m^3$ or ppmv. [P# 213-0085]

b. Record Keeping Requirements

i. The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by EMU-019. [P#213-0085]

ii. The Permittee shall keep records of all compounds used along with MSDS's or technical data sheets for each compound. [P#213-0085]

iii. The Permittee shall maintain annual records of premises HAP emissions to demonstrate that the source is not subject to major source thresholds (less than twenty-five (25) tons per year of aggregated federal HAPs and/or less than ten (10) tons per year of any one federal HAP). [P# 213-0085]

K. EMISSIONS UNIT EMU-020 (Binks Spray Booth #2)

Table III.K: EMU-020 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Maximum Annual Coating Usage	Shall not exceed 200 gal	P# 213-0086	K.1
Maximum VOC Content of Coating	Shall not exceed 7.18 lb/gal, as applied	P# 213-0086	K.2
Minimum Particulate Control Efficiency	No less than 99.5%	P# 213-0086	K.3
Criteria Pollutant Maximum Allowable Emissions	Emissions shall not exceed: lb/hr / TPY PM 0.0257 / 0.013 VOC 7.86 / 2.00 Pb 0.0001 / 0.00005	P# 213-0086	K.4
Hazardous Air Pollutants (HAPs)	The Permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA§22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the Permittee ensures that such emission complies with the applicable MASC.	P# 213-0086	K.5

Compliance Demonstration

K.1. Maximum Annual Coating Usage: Maximum annual coating usage shall not exceed those limits in condition K.1, Table III.K of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor annual coating usage for EMU-020. [P# 213-0086]

b. Record Keeping Requirements

The Permittee shall keep records of annual coating usage. Annual coating usage shall be based on any consecutive twelve (12) month time period and shall be determined by adding the current month's coating usage to that of the previous eleven (11) months. The Permittee shall make these calculations monthly. [P# 213-0086]

K.2. Maximum VOC Content of Coating: Maximum VOC content of coating shall not exceed those limits in condition K.2, Table III.K of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the usage of coatings, paints, thinners and cleaners used in EMU-020 through records of material usage. [P# 213-0086]

b. Record Keeping Requirements

The Permittee shall keep daily records of all coating used in this booth. Such records shall contain the following information:

i. Date paint used;
ii. Description of the paint, including name and density (lb/gal);
iii. Volatile organic compound content by weight (lb VOC/gal);
iv. Water and exempt VOC content by weight;
v. Non-volatile content by volume and by weight;
vi. Quantity of paint used (lb/hr);
vii. Quantity of diluent used for each paint (lb, gallons); and
viii. Type of material being coated (metal or non-metal). [P# 213-0086]

K.3. Minimum Particulate Control Efficiency: Minimum particulate control efficiency shall not be less than those limits in condition K.3, Table III.K of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the operation of this source to ensure that the particulate control used is operated in accordance with manufacturer's specifications. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)]

b. Record Keeping Requirements

The Permittee shall keep a record of the manufacturer's specifications for control efficiency. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

K.4. Criteria Pollutant Maximum Allowable Emissions: Criteria pollutant maximum allowable emissions shall not exceed those limits in condition K.4, Table III.K of this Title V Operating Permit.

a. Monitoring and Testing Requirements

i. The Permittee shall calculate the emission rates using emission factors from the following sources:

A. Data obtained from the facility in the previous two (2) years; and
B. Mass balance and Material Safety Data Sheets (MSDS).

This shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the emission limits in condition K.4, Table III.K of this Title V

Operating Permit, as allowed by state or federal statute, law or regulation. [P# 213-0086]

ii. The Permittee shall operate and maintain the spray booth, spray gun(s), and particulate filter according to the manufacturer's specifications in order to achieve the guaranteed transfer efficiency. Maintenance shall include, but not be limited to, the following:

A. Minimize the distance from the spray gun to the object to be coated;
B. Minimize the air velocity in the spray booth (but not below health-based requirements); and
C. Keep the atomizing air pressure at a minimum level as recommended by the manufacturer. [P#213-0086]

b. Record Keeping Requirements

The Permittee shall keep records of daily and consecutive twelve (12) month VOC emissions, as well as cumulative year-to-date paint usage and VOC emissions. The twelve (12) month record of VOC emissions shall be determined by adding the current month's record to that of the previous eleven (11) months. These calculations shall be made on a monthly basis. [P# 213-0086]

K.5. Hazardous Air Pollutants (HAPs): Hazardous Air Pollutant emissions shall comply with the limit in condition K.5, Table III.K of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC.

The MASC shall be calculated using the following equation:

MASC = 1,580 * HLV * (5-4((T-0.5)/7.5))

where:

MASC= Maximum Allowable Stack Concentration ($\mu g/m^3$ or ppmv)
1,580 = Constant based on stack parameters
HLV = Hazard limiting value ($\mu g/m^3$ or ppmv)
T = the cumulative hours of operation in an 8 hour period, not to exceed 8 hours

The ASC shall be calculated using the HAP content as applied (1b/gal), the maximum application rate (gal/hr) as a worst case, and any applicable controls. This gives actual stack emissions in lb/hr which can be converted to a concentration in $\mu g/m^3$ or ppmv. [P# 213-0086]

b. Record Keeping Requirements

i. The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by EMU-020. [RCSA ɔ22a-174-33(o)(2) & 40 CFR ɔ70.6(a)(3)]

ii. The Permittee shall keep records of all compounds used along with MSDS's or technical data sheets for each compound. [P#213-0086]

iii. The Permittee shall maintain annual records of premises HAP emissions to demonstrate that they do not qualify as a major source of federal HAPs emissions (i.e. < 25 TPY of federal HAPs in aggregate or < 10 TPY of any HAP, or less than any quantity established by the Administrator pursuant to 40 CFR Part 63), thereby excluding the source from the requirements of an affected source under 40 CFR Part 63 Subpart GG "Aerospace Manufacturing and Rework Facilities NESHAP". [P# 213-0086]

c. Reporting Requirements

The Permittee shall submit a report to the Commissioner of any changes in materials, which contain hazardous air pollutants (HAP) that are regulated under RCSA §22a-174-29, and a demonstration of compliance with the MASC within thirty (30) days of such changes. [P# 213-0086]

L. GROUPED EMISSIONS UNIT GEMU-005 (EMU-021 – EMU-022 – Open-Top Vapor Degreasers – Non-Exempt VOC)

Table III.L: GEMU-005 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
VOC	Shall not exceed the following: EMU # / HSC EMU # / Monthly VOC Usage (gal/month) / Annual VOC Emissions (tons/year) EMU-021 / E63931 / 18.33 / 1.298 EMU-022 / E18141 / 21.00 / 1.400	O #8029	L.1
VOC	Emissions shall not exceed 2.698 tpy and 0.225 tons/month	O #8029	
Non-Criteria Pollutant Maximum Allowable Emissions	Shall not exceed Maximum Allowable Stack Concentrations for any pollutant listed in RCSA §22a-174-29	O #8029	L.2

Compliance Demonstration

L.1. VOC: Maximum allowable monthly VOC usage and annual VOC emissions shall not exceed those limits in condition L.1, Table III.L of this Title V Operating Permit.

a. Equipment Design and Operating Standards

i. The Permittee shall equip each vapor degreaser in GEMU-005 with a cover that can be opened and closed easily without disturbing the vapor zone. [O #8029, RCSA §22a-174-20(l)(4)(A)]

ii. The Permittee shall ensure that each vapor degreaser in GEMU-005 has a freeboard ratio of

at least 0.75. [O #8029]

iii. The Permittee shall provide the following safety switches for each vapor degreaser in GEMU-005:

A. A condenser flow switch and device which shuts off the sump heat if the condenser coolant is not circulating or if the vapor level rises above the height of the primary condenser; and

B. A spray safety switch which shuts off the spray pump if the vapor level drops more than 10 centimeters (4 inches) below the lowest condensing coil. [O #8029, RCSA §22a-174-20(l)(4)(B)]

iv. The Permittee shall ensure that each vapor degreaser in GEMU-005 with an open area greater than one square meter (10.8 square feet) be equipped with one of the following control devices:

A. Refrigerated chiller; or

B. Carbon adsorption system, with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of solvent/vapor area (when cover is open), and exhausting less than 25 parts per million of degreasing solvent averaged each complete adsorption cycle. [O #8029, RCSA §22a-174-20(l)(4)(C)]

v. The Permittee shall keep the cover closed on each vapor degreaser in GEMU-005 at all times except when processing work loads through the degreaser. [O #8029, RCSA §22a-174-20(l)(4)(D)]

vi. The Permittee shall store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party, such that greater than 20 percent of waste degreasing solvent (by weight) can evaporate into the atmosphere. [O #8029, RCSA §22a-174-20(l)(4)(E)]

vii. The Permittee shall minimize solvent carryout by:

A. Racking parts that are normally racked to allow complete drainage;

B. Moving parts in and out of the degreasing unit at less than 3.3 meters per minute (11 feet per minute);

C. Holding the parts in the vapor zone at least thirty (30) seconds or until condensation ceases, whichever is longer;

D. Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and

E. Allowing parts to dry within the degreasing unit for at least fifteen seconds or until visually dry, whichever is longer. [O #8029, RCSA §22a-174-20(l)(4)(F)]

viii. The Permittee shall not degrease porous or absorbent materials, such as cloth, leather, wood or rope. Unracked parts which are lowered into the degreaser by a hoist are exempt from this requirement. [O #8029, RCSA §22a-174-20(l)(4)(G)]

ix. The Permittee shall ensure to not occupy more than half of each vapor degreaser in GEMU-005 open top area with a workload. Unracked parts which are lowered into the degreaser by a hoist are exempt from this requirement. [O #8029, RCSA §22a-174-20(l)(4)(H)]

x. The Permittee shall not load each vapor degreaser in GEMU-005 to the point where the vapor level would drop more than ten (10) centimeters (4 inches) when the workload is removed from the vapor zone. Unracked parts which are lowered into the degreaser by a hoist are exempt from this requirement. [O #8029, RCSA §22a-174-20(l)(4)(I)]

xi. The Permittee shall always spray within the vapor layer. [O #8029, RCSA §22a-174-20(l)(4)(J)]

xii. The Permittee shall operate each vapor degreaser in GEMU-005 so as to prevent water from being visually detectable in solvent exiting the water separator. [O #8029, RCSA §22a-174-20(l)(4)(K)]

xiii. The Permittee shall not expose each vapor degreaser in GEMU-005 to drafts greater than forty (40) meters per minute (131 feet per minute) as measured between 1 and 2 meters upwind and at the same elevation as the tank lip, nor provide exhaust ventilation exceeding twenty (20) cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreasing unit open area, unless necessary to meet OSHA requirements. [O #8029, RCSA §22a-174-20(l)(4)(L)]

xiv. The Permittee shall not operate any vapor degreaser in GEMU-005 with any visible solvent leak until the leak is repaired, or the vapor degreaser will be emptied of solvent and shut down. [O #8029, RCSA §22a-174-20(l)(4)(M)]

xv. The Permittee shall provide a permanent, conspicuous label on or posted near each vapor degreaser in GEMU-005 summarizing the applicable operating requirements. [O #8029, RCSA §22a-174-(l)(4)(N)]

xvi. The Permittee shall locate the cover required in Section III.L.1.a.i of this Title V Operating Permit below the lip exhaust if the vapor degreaser is equipped with a lip exhaust. [RCSA §22a-174-20(l)(4)(P)]

xvii. The Permittee shall store all dirty cloth and paper rags which are to be disposed in covered containers until final disposal. [O# 8029]

xviii. The Permittee shall store, all dirty cloth and paper rags which are to be cleaned and recycled in covered containers until they are ready to be cleaned and recycled. [O# 8029]

xix. The Permittee shall ensure that rags being used for handwiping not be visibly dripping VOC during use. [O# 8029]

xx. The Permittee shall store rags that have been used with a VOC and are to be used again with a VOC in a covered container until reused. [O# 8029]

xxi. The Permittee shall equip the dispensing containers for the solvents used in handwiping operations with a lid or similar device which is closed when not in use. [O# 8029]

xxii. The Permittee shall wipe up any solvent spilled during the transfer either from the dispensing area or to any degreaser and any wipe rags subsequently should be stored in a closed container until proper disposal. [O# 8029]

b. Monitoring Requirements

The Permittee shall monitor the operation of each vapor degreaser in GEMU-005 to ensure that all equipment design and operating standards are met as specified in Section III.L.1.a of this Title V Operating Permit. [RCSA ɔ22a-174-33(j)(1)(K) & 40 CFR ɔ70.6(a)(3)(i)]

c. Record Keeping Requirements

i. The Permittee shall maintain a recordkeeping system of all adds to each vapor degreaser in GEMU-005. This record shall include the date of the add and amount in gallons. [O #8029]

ii. The Permittee shall develop and maintain a monthly recordkeeping system of all VOCs dispensed for operations other than degreasing as identified in Section III.L.1.c.i of this Title V Operating Permit broken down by each type of VOC. [O #8029]

iii. The Permittee shall maintain a monthly recordkeeping system for all waste VOC (solvent portion only) from all vapor degreasers in GEMU-005 which is either recycled or manifested as waste. The amounts recorded will be subtracted from the VOCs recorded in Section III.L.1.c.i and Section III.L.1.c.ii of this Title V Operating Permit to determine actual emissions. [O #8029]

iv. The Permittee shall maintain a monthly record of solvent added to each vapor degreaser in GEMU-005. [RCSA §22a-174-20(l)(4)(O)]

d. Reporting Requirements

i. The Permittee shall maintain and keep on file a quarterly summary of total VOC usage in gallons for each vapor degreaser in GEMU-005 broken down by each type of VOC. Convert the gallons to tons of VOC. [O #8029]

ii. The Permittee shall maintain and keep on file a quarterly summary of total waste VOC (solvent portion only) from all vapor degreasers in GEMU-005 in gallons which was manifested as waste or recycled. Convert the gallons to tons of VOC. [O #8029]

iii. The quarterly reports required in Section III.L.1.d.i and Section III.L.1.d.ii of this Title V Operating Permit shall be maintained and kept on file on the premises for Commissioner review or submittal upon request. [O #8029]

iv. The Permittee shall report to the Commissioner immediately any changes or proposed changes in the solvent used in a vapor degreaser in GEMU-005. [O #8029]

v. The Permittee shall submit, as part of requested Pre-Inspection Questionnaires, a complete and detailed record of the total VOC usage and emissions as specified in Section III.L.1.d.iii of this Title V Operating Permit. [O #8029]

vi. The Permittee shall notify the Commissioner whenever a vapor degreasing unit in GEMU-005 is being replaced and assigned a new identification number. The Permittee shall notify the Commissioner in writing prior to the commencement of operation of the unit and supplying the building location number, identification number of the unit, capacity in gallons, solvent type and maximum allowable monthly usage. [O #8029]

L.2. Non-Criteria Pollutant Maximum Allowable Emissions: Emissions shall not exceed those limits in condition L.2, Table III.L of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by each unit in GEMU-005. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)]

b. Record Keeping Requirements

The Permittee shall make and keep records of the ASC and MASC calculations for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by each unit in GEMU-005. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

M. EMISSIONS UNIT EMU-023 (Still – Non-Exempt VOC)

Table III.M: EMU-023 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
VOC	Shall not exceed the following: HSC EMU # F0651: Maximum Condenser Coolant Temperature (°F) 102	O #8029	M.1
Minimum VOC Recovery Rate	No less than 95%	O #8029	

Section III: Applicable Requirements and Compliance Demonstration

Compliance Demonstration

M.1. Maximum Condenser Coolant Temperature, Minimum VOC Recovery Rate: Maximum Condenser Coolant Temperature shall comply with those limits in condition M.1, Table III.M of this Title V Operating Permit.

a. Equipment Design and Operating Standards

The Permittee shall ensure that all waste solvent (before being recovered in the solvent recovery still) and all waste sludge residues (before being sent out as waste product) must be stored in closed containers which prevent the evaporation of VOC to the atmosphere. [O #8029]

b. Monitoring and Testing Requirements

i. The Permittee shall cease operation of any solvent recovery still processing a VOC, whether an integral part of a single vapor degreaser or a stand alone unit used exclusively as a solvent recovery still, whenever the solvent recovery still coolant circulating through the condenser coil on the solvent recovery still exceeds the limits in condition M.1, Table III.M of this Title V Operating Permit for each of the VOC's used by the Permittee. [O #8029]

ii. The Permittee shall monitor the condenser coil outlet coolant temperature on the solvent recovery still by using a trip alarm set to the required limit in condition M.1, Table III.M of this Title V Operating Permit for the VOC being condensed to ensure that the efficiency of the solvent recovery does not go below a ninety-five (95) percent control efficiency. The parameters shall be monitored once per day until the alarm is installed if the unit is in service. [O #8029]

c. Record Keeping Requirements

i. The Permittee shall maintain records of all exceedances of condenser coil outlet coolant temperature. Such records shall include the EMU#, HSC EMU#, date, temperature of condenser coil outlet temperature, and remediation action taken. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

ii. The Permittee shall maintain records of all malfunctions of the solvent recovery still. [O#8029]

d. Reporting Requirements

The Permittee shall make available on request the records required in Section III.M.1.c. [O #8029]

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N. GROUPED EMISSIONS UNIT GEMU-006 (EMU-024 – EMU-025 – Stills – Exempt VOC)

Table III.N: GEMU-006 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Maximum Condenser Coolant Temperature	See nested table below	O #8029	N.1
Minimum VOC Recovery Rate	No less than 95%	O #8029	

EMU #	HSC EMU #	Maximum Condenser Coolant Temperature (^{o}F)
EMU-024	E45127	80
EMU-025	F0652	140

Compliance Demonstration

N.1. Maximum Condenser Coolant Temperature, Minimum VOC Recovery Rate: Maximum Condenser Coolant Temperature shall comply with those limits in condition N.1, Table III.N of this Title V Operating Permit.

a. Equipment Design and Operating Standards

The Permittee shall ensure that all waste solvent (before being recovered in the solvent recovery still) and all waste sludge residues (before being sent out as waste product) must be stored in closed containers which prevent the evaporation of VOC to the atmosphere. [O #8029]

b. Monitoring and Testing Requirements

i. The Permittee shall cease operation of any solvent recovery still processing a VOC, whether an integral part of a single vapor degreaser or a stand alone unit used exclusively as a solvent recovery still, whenever the solvent recovery still coolant circulating through the condenser coil on the solvent recovery still exceeds the limits in condition N.1, Table III.N of this Title V Operating Permit for each of the VOC's used by the Permittee. [O #8029]

ii. The Permittee shall monitor the condenser coil outlet coolant temperature on the solvent recovery still by using a trip alarm set to the required limit in condition N.1, Table III.N of this Title V Operating Permit for the VOC being condensed to ensure that the efficiency of the solvent recovery does not go below a ninety-five (95) percent control efficiency. The parameters shall be monitored once per day until the alarm is installed if the unit is in service. [O #8029]

c. Record Keeping Requirements

i. The Permittee shall maintain records of all exceedances of condenser coil outlet coolant temperature. Such records shall include the EMU#, HSC EMU#, date, temperature of condenser coil outlet temperature, and remediation action taken. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

ii. The Permittee shall maintain records of all malfunctions of the solvent recovery still. [O#8029]

d. Reporting Requirements

The Permittee shall make available on request the records required in Section III.N.1.b. [O #8029]

O. GROUPED EMISSIONS UNIT GEMU-007 (EMU-026 – EMU-027 – Open-Top Vapor Degreasers – Exempt VOC)

Table III.O: GEMU-007 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
VOC	Shall not exceed the following if the vapor degreasers listed below are ever converted to a non-exempt VOC:	O #8029	O. 1
Non-Criteria Pollutant Maximum Allowable Emissions	Shall not exceed Maximum Allowable Stack Concentrations for any pollutant listed in RCSA §22a-174-29	O #8029	O.2
Halogenated HAPs	Emissions from EMU-026 shall not exceed a 3-month rolling average monthly emission limit of 150 kg/m^2/month.	40 CFR 63.463(a)(1)	O.3

EMU #	HSC EMU #	Monthly VOC Usage (gal/month)	Annual VOC Emissions (tons/year)
EMU-026	E45172	0.74	0.05
EMU-027	E45170	119.08	8.04

Compliance Demonstration

O.1. VOC: Maximum allowable monthly VOC usage and annual VOC emissions shall not exceed those limits in condition O.1, Table III.O of this Title V Operating Permit.

a. Equipment Design and Operating Standards

The Permittee shall comply with all equipment design and operating standards in Section III.L.a of this Title V Operating Permit for each vapor degreaser in GEMU-007 that converts to a non-exempt VOC. [O #8029]

b. Monitoring Requirements

The Permittee shall comply with all monitoring requirements in Section III.L.b of this Title V Operating Permit for each vapor degreaser in GEMU-007 that converts to a non-exempt VOC. [O #8029]

c. Record Keeping Requirements

The Permittee shall comply with all record keeping requirements in Section III.L.c of this Title V Operating Permit for each vapor degreaser in GEMU-007 that converts to a non-exempt VOC. [O #8029]

d. Reporting Requirements

i. The Permittee shall notify the Commissioner in writing if it ever proposes to use a non-exempt VOC in any of the vapor degreasers in GEMU-007. [O #8029]

ii. The Permittee shall comply with all reporting requirements in Section III.L.d of this Title V Operating Permit for each vapor degreaser in GEMU-007 that converts to a non-exempt VOC. [O #8029]

iii. The Permittee shall notify the Commissioner whenever a vapor degreaser in GEMU-007 is being replaced and assigned a new identification number. The Permittee shall notify the Commissioner in writing prior to the commencement of operation of the unit and supplying the building location number, identification number of the unit, capacity in gallons, solvent type and maximum allowable monthly usage. [O #8029]

O.2. Non-Criteria Pollutant Maximum Allowable Emissions: Emissions shall not exceed those limits in condition O.2, Table III.O of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by each unit in GEMU-007. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)]

b. Record Keeping Requirements

The Permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by each unit in GEMU-007. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

O.3. Halogenated HAP Solvent: Emissions shall not exceed those limits in condition O.3, Table III.O of this Title V Operating Permit.

a. Monitoring and Testing Requirements

i. The Permittee shall ensure that the emissions from EMU-026 are equal to or less than the emission limit in condition O.3, Table III.O of this Title V Operating Permit as determined using the procedures in Section III.O.3.a.ii and Section III.O.3.a.iii of this Title V Operating Permit. [40 CFR 63.463(a)(1)(ii)]

ii. The Permittee shall ensure, on the first operating day of every month, that EMU-026 contains only clean liquid solvent. This includes but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleared of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within EMU-026 must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in Section III.O.3.a.iii of this Title V Operating Permit. EMU-026 does not have to be emptied and filled with fresh unused solvent prior to calculations. [40 CFR 63.465(b)]

iii. The Permittee shall, on the first operating day of the month, comply with the following requirements:

A. The Permittee shall determine solvent emissions (E_i), using the records of all solvent additions and deletions for the previous reporting period required in Section III.O.3.b.i of this Title V Operating Permit, using the following equation:

$$E_i = \frac{SA_i - LSR_i - SSR_i}{AREA_i}$$

where:

E_i = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per square meter of solvent/air interface area per month).

SA_i = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per month).

LSR_i = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per month).

SSR_i = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine in solid waste, obtained as described in Section III.O.3.a.iii.B of this Title V Operating Permit, during the most recent monthly reporting period i, (kilograms of solvent per month).

$AREA_i$ = the solvent/air interface area of the solvent cleaning machine (square meters). [40 CFR 63.465(c)(1)]

B. The Permittee shall determine SSR_i from tests conducted using EPA reference method 25d or by engineering calculations included in the initial compliance report. [40 CFR 63.465(c)(2)]

C. The Permittee shall determine the monthly rolling average, EA, for the three month period ending with the most recent reporting period using the following equation:

$$EA_i = \frac{\sum_{j=1}^{3} E_i}{3}$$

where:

EA_i = the average halogenated HAP solvent emissions over the preceeding 3 monthly reporting periods, (kilograms of solvent per square meter of solvent/air interface area per month).

E_i = halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods, (kilograms of solvent per square meter of solvent/air interface area per month).

$_{j=1}$ = the most recent monthly reporting period.

$_{j=2}$ = the monthly reporting period immediately prior to $_{j=1}$.

$_{j=3}$ = the monthly reporting period immediately prior to $_{j=2}$. [40 CFR 63.465(c)(3)]

b. <u>Record Keeping Requirements</u>

i. The Permittee shall maintain a log of solvent additions and deletions for EMU-026. [40 CFR 63.463(a)(1)(i)]

ii. The Permittee shall maintain a record of the dates and amounts of solvent that are added to EMU-026. [40 CFR 63.467(c)(1)]

iii. The Permittee shall maintain a record of the solvent composition of wastes removed from EMU-026 as determined by using the procedure described in Section III.O.3.a.iii.B of this Title V Operating Permit. [40 CFR 63.467(c)(2)]

iv. The Permittee shall maintain calculation sheets showing how monthly emissions and the rolling 3-month average emissions from EMU-026 were determined, and the results of all calculations. [40 CFR 63.467(c)(3)]

c. <u>Reporting Requirements</u>

i. The Permittee shall submit a solvent emission report every year. This solvent emission report shall contain the following: [40 CFR 63.468(g)]

A. The size and type of unit for EMU-026. (solvent/air interface area or cleaning capacity). [40 CFR 63.468(g)(1)]
B. The average monthly solvent consumption for EMU-026 in kilograms per month. [40 CFR 63.468(g)(2)]
C. The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in Section III.O.3.a.iii. [40 CFR 63.468(g)(3)]

ii. The Permittee shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under Section III.O.3.c.iii of this Title V operating permit is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include, as applicable, the following: [40 CFR 63.468(h)]

A. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken. [40 CFR 63.468(h)(2)]
B. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report. [40 CFR 63.468(h)(3)]

iii. If the Permittee is required to submit an exceedance report on a quarterly (or more frequent) basis, the Permittee may reduce the frequency of reporting to semiannual if the following conditions are met: [40 CFR 63.468(i)]

A. The Permittee has demonstrated a full year of compliance without an exceedance. [40 CFR 63.468(i)(1)]
B. The Permittee continues to comply with all relevant record keeping and monitoring requirements specified in 40 CFR 63, Subpart A (General Provisions) and in 40 CFR 63, Subpart T. [40 CFR 63.468(i)(2)]
C. The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of 40 CFR 63, Subpart A (General Provisions). [40 CFR 63.468(i)(3)]

P. GROUPED EMISSIONS UNIT GEMU-008 (EMU-028 – Handwiping Operations – VOC)

Table III.P: GEMU-008 – Applicable Requirements

Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/ Citations	Compliance Demonstration Condition Number
Handwiping Operations	Equipment Design and Operating Standards required by Order #8029.	O #8029	P.1
Non-Criteria Pollutant Maximum Allowable Emissions	Shall not exceed Maximum Allowable Stack Concentrations for any pollutant listed in RCSA §22a-174-29	O #8029	P.2

Compliance Demonstration

P.1. VOC: Operation of GEMU-008 shall be in accordance with condition P.1, Table III.P of this Title V Operating Permit.

Section III: Applicable Requirements and Compliance Demonstration

a. Equipment Design and Operating Standards

i. The Permittee shall store all dirty cloths and paper rags, which are to be disposed of, in covered containers until final disposal. [O #8029]

ii. The Permittee shall store all dirty rags, which are to be cleaned and recycled, in covered containers until they are ready to be cleaned. [O #8029]

iii. The Permittee shall ensure that rags being used for hand wiping not be visibly dripping VOC during use. [O #8029]

iv. The Permittee shall store a rag that has been used with a VOC and is to be used again with a VOC in a covered container until reused. [O #8029]

v. The Permittee shall equip the dispensing containers for the solvents used in the handwiping operations with a lid or similar device which is closed when not in use. [O #8029]

P.2. Non-Criteria Pollutant Maximum Allowable Emissions: Emissions shall not exceed those limits in condition P.2, Table III.P of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by each unit in GEMU-008. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)]

b. Record Keeping Requirements

The Permittee shall make and keep records of the ASC and MASC calculations for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by each unit in GEMU-008. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

Section III: Applicable Requirements and Compliance Demonstration

Q. GROUPED EMISSIONS UNIT GEMU-009 (EMU-029 – Cold Cleaning Units – VOC)

Table III.Q: GEMU-009 – Applicable Requirements			
Pollutants or Process Parameters	**Limitations or Restrictions**	**Applicable Regulatory References/ Citations**	**Compliance Demonstration Condition Number**
VOC	Equipment Design and Operating Standards as required by RCSA §22a-170-20(l)(3).	RCSA §22a-174-20(l)(3)	Q.1

Compliance Demonstration

Q.1. VOC: Operation of GEMU-009 shall be in accordance with condition Q.1, Table III.Q of this Title V Operating Permit.

a. <u>Equipment Design and Operating Standards</u>

i. The Permittee shall equip the cold cleaning units in GEMU-009 with a cover designed so that it can be easily operated with one hand. [RCSA §22a-174-20(l)(3)(A)]

ii. The Permittee shall equip the cleaning device with a facility for draining cleaned parts constructed internally so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system. [RCSA §22a-174-20(l)(3)(B)]

iii. The Permittee shall store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party, in a manner such that greater than 20 percent of the waste degreasing solvent (by weight) can evaporate into the atmosphere. [RCSA §22a-174-20(l)(3)(C)]

iv. The Permittee shall close the cover whenever parts are not being handled in the cleaner for two (2) minutes or more, or when the device is not in use. [RCSA §22a-174-20(l)(3)(D)]

v. The Permittee shall drain the cleaned parts for at least 15 seconds or until dripping ceases, whichever is longer. [RCSA §22a-174-20(l)(3)(E)]

vi. The Permittee shall, if used, supply a degreasing solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure which does not exceed ten (10) pounds per square inch as measured at the pump outlet and perform such spraying within the confines of the cold cleaning unit. [RCSA §22a-174-20(l)(3)(F)]

vii. The Permittee shall install one of the following control devices if the solvent vapor pressure is greater than 4.3 kilo pascals (33 millimeters of mercury or 0.6 pounds per square inch) measured at 38 degrees Celsius (100 degrees Fahrenheit) or if the solvent is heated above 50 degrees Celcius (120 degreed Farenheit): [RCSA §22a-174-20(l)(3)(G)]

A. freeboard that gives a freeboard ratio greater than or equal to 0.7;
B. water cover (solvent must be insoluable in and heavier than water); or

C. other systems of equivalent control, equal to that of a "refrigerated chiller" or carbon adsorption approved by the Commissioner by permit or order.

viii. The Permittee shall minimize the drafts across the top of each cold cleaning unit such that whenever the cover is open the unit is not exposed to drafts greater than 40 meters per minute, as measured between 1 and 2 meters upwind, and at the same elevation as the tank lid. [RCSA §22a-174-20(l)(3)(H)]

ix. The Permittee shall not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired. [RCSA §22a-174-20(l)(3)(I)]

x. The Permittee shall provide a permanent, conspicuous label on or posted near each unit summarizing the applicable operating requirements. [RCSA §22a-174-20(l)(3)(J)]

b. Monitoring and Testing Requirements

The Permittee shall monitor the monthly amount of solvent added to each cold cleaning unit in GEMU-009. [RCSA §22a-174-20(l)(3)(K)]

c. Record Keeping Requirements

The Permittee shall maintain a monthly record of the amount of solvent added to each cold cleaning unit in GEMU-009. [RCSA §22a-174-20(l)(3)(K)]

Q.2. Non-Criteria Pollutant Maximum Allowable Emissions: Emissions shall not exceed those limits in condition Q.2, Table III.Q of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by each unit in GEMU-009. The Permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)]

b. Record Keeping Requirements

The Permittee shall make and keep records of the ASC and MASC calculations for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 & 29-3 emitted by each unit in GEMU-009. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

Section III: Applicable Requirements and Compliance Demonstration

R. GROUPED EMISSIONS UNIT GEMU-010 (EMU-030 – Flush & Test Rigs – VOC)

Table III.R: GEMU-010 – Applicable Requirements			
Pollutants or Process Parameters	**Limitations or Restrictions**	**Applicable Regulatory References/ Citations**	**Compliance Demonstration Condition Number**
VOC - Highly Photochemically Reactive Organic Solvents	Emissions shall not exceed 40 lb/day and 8 lb/hr	RCSA §22a-174-20(f)(2)	R.1
VOC – Organic Solvents	Emissions shall not exceed 800 lb/day and 160 lb/hr	RCSA §22a-174-20(f)(4)	R.2

Compliance Demonstration

R.1. VOC – Highly Photochemically Reactive Organic Solvents: Emissions of highly photochemically reactive organic solvents shall not exceed those limits in condition R.1, Table III.R of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the emissions of highly photochemically reactive organic solvents, as defined in RCSA §22a-174-20(i), to ensure compliance with condition R.1, Table III.R of this Title V Operating Permit. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)]

b. Record Keeping Requirements

The Permittee shall keep a record of daily and hourly emissions of highly photochemically reactive organic solvents. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

R.2. VOC – Organic Solvents: Emissions of organic solvents shall not exceed those limits in condition R.2, Table III.R of this Title V Operating Permit.

a. Monitoring and Testing Requirements

The Permittee shall monitor the emissions of organic solvents to ensure compliance with condition R.2, Table III.R of this Title V Operating Permit. [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)]

b. Record Keeping Requirements

The Permittee shall keep a record of daily and hourly emissions of organic solvents. [RCSA §22a-174-33(o)(2) & 40 CFR §70.6(a)(3)]

Section III: Applicable Requirements and Compliance Demonstration

S. GROUPED EMISSIONS UNIT GEMU-011 (EMU-031 – EMU-032 – Chromium Plating Lines)

Table III.S: GEMU-011 – Applicable Requirements			
Pollutants or Process Parameters	**Limitations or Restrictions**	**Applicable Regulatory References/ Citations**	**Compliance Demonstration Condition Number**
Chromium	Emissions shall not exceed 0.03 mg/dscm ($1.3x10^{-5}$ gr/dscf)	40 CFR 63.342(c)(1)(ii)	S.1

Compliance Demonstration

S.1. VOC – Chromium: Emissions of chromium shall not exceed those limits in condition S.1, Table III.S of this Title V Operating Permit.

a. <u>Equipment Design and Operating Standards</u>

i. The Permittee shall operate and maintain GEMU-011, including associated air pollution control devices and monitoring equipment, at all times, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by 40 CFR §63.342(f)(3). [40 CFR §63.342(f)(1)(i)]

ii. The Permittee shall correct malfunctions as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by 40 CFR §63.342(f)(3). [40 CFR §63.342(f)(1)(ii)]

iii. The Permittee shall comply with all requirements of the operation and maintenance plan required by 40 CFR §63.342(f)(3). [40 CFR §63.342(f)(3)]

iv. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source. [40 CFR §63.342(f)(2)(i)]

v. Based on the results of a determination made under Section III.S.1.a.iv of this Title V Operating Permit, the Administrator may require that the Permittee make changes to the operation and maintenance plan required by 40 CFR §63.342(f)(3). Revisions may be required if the Administrator finds that the plan:

A. Does not address a malfunction that has occurred;
B. Fails to provide for the operation of GEMU-011, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
C. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable. [40 CFR §63.342(f)(2)(ii)]

b. Monitoring Requirements

The Permittee shall monitor and record the pressure drop across the packed bed scrubber in conjunction with a composite mesh-pad system once each day that any EMU in GEMU-011 is operating. To be in compliance with the standards, the composite mesh-pad system shall be operated within ±1 inch of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests. [40 CFR §63.343(c)(3)]

c. Record Keeping Requirements

i. The Permittee shall maintain inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards in Section III.S.1.a of this Title V Operating Permit have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection. [40 CFR §63.346(b)(1)]

ii. The Permittee shall maintain records of all maintenance performed on GEMU-011, the add-on air pollution control device, and monitoring equipment. [40 CFR §63.346(b)(2)]

iii. The Permittee shall maintain records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment. [40 CFR §63.346(b)(3)]

iv. The Permittee shall maintain records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan required by 40 CFR 63.342(f)(3). [40 CFR §63.346(b)(4)]

v. The Permittee shall maintain other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by 40 CFR 63.342(f)(3). [40 CFR §63.346(b)(5)]

vi. The Permittee shall maintain records of test reports documenting results of all performance tests. [40 CFR §63.346(b)(6)]

vii. The Permittee shall maintain records of all measurements as may be necessary to determine the conditions of performance tests. [40 CFR §63.346(b)(7)]

viii. The Permittee shall maintain records of monitoring data required by Section III.S.1.b of this Title V Operating Permit that are used to demonstrate compliance with the standard including the date and time the data are collected. [40 CFR §63.346(b)(8)]

ix. The Permittee shall maintain records of the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment. [40 CFR §63.346(b)(9)]

x. The Permittee shall maintain records of the specific identification (i.e., the date and time of

commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment. [40 CFR §63.346(b)(10)]

xi. The Permittee shall maintain records of the total process operating time of GEMU-011 during the reporting period. [40 CFR §63.346(b)(11)]

xii. The Permittee shall maintain records of the actual cumulative rectifier capacity of hard chromium electroplating tanks at a facility expended during each month of the reporting period, and the total capacity expended to date for a reporting period, if the Permittee is using the cumulative rectifier capacity to determine facility size in accordance with 40 CFR 63.342(c)(2). [40 CFR §63.346(b)(12)]

xiii. The Permittee shall maintain records of all documentation supporting the notifications and reports required by 40 CFR §63.9, 40 CFR §63.10, and 40 CFR §63.347. [40 CFR §63.346(b)(13)]

d. <u>Reporting Requirements</u>

i. The Permittee shall prepare a summary report to document the ongoing compliance status of GEMU-011. The report shall be completed annually, except as provided in Section III.S.1.d.ii of this Title V Operating Permit, and retained on site, and made available to the Administrator upon request. The report shall include the following information: [40 CFR §63.347(h)(1)]

A. The company name and address of the affected source; [40 CFR §63.347(g)(3)(i)]
B. An identification of the operating parameter that is monitored for compliance determination, as required by Section III.S.1.b of this Title V Operating Permit; [40 CFR §63.347(g)(3)(ii)]
C. The relevant emission limitation for GEMU-011, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status that was required by 40 CFR §63.347(e); [40 CFR §63.347(g)(3)(iii)]
D. The beginning and ending dates of the reporting period; [40 CFR §63.347(g)(3)(iv)]
E. A description of the type of process performed in GEMU-011; [40 CFR §63.347(g)(3)(v)]
F. The total operating time of GEMU-011 during the reporting period; [40 CFR §63.347(g)(3)(vi)]
G. The actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis; [40 CFR §63.347(g)(3)(vii)]
H. A summary of the operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes; [40 CFR §63.347(g)(3)(viii)]
I. A certification by a responsible official, as defined in 40 CFR §63.2 that the work practice standards in 40 CFR §63.342(f) were followed in accordance with the operation and maintenance plan required by 40 CFR §63.342(f)(3) for the source; [40 CFR §63.347(g)(3)(ix)]

J. If the operation and maintenance plan required by 40 CFR §63.342(f)(3) was not followed, an explanation of the reasons for not allowing the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report(s) required by 40 CFR §63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed; [40 CFR §63.347(g)(3)(x)]
K. A description of any changes in monitoring, processes, or controls since the last reporting period; [40 CFR §63.347(g)(3)(xi)]
L. The name, title, and signature of the responsible official who is certifying the accuracy of the report; and [40 CFR §63.347(g)(3)(xii)]
M. The date of the report. [40 CFR §63.347(g)(3)(xiii)]

ii. The Permittee shall prepare the report required by Section III.S.1.d.i of this Title V Operating Permit semi-annually and submit them to the Administrator, if both of the following conditions are met: [40 CFR §63.347(h)(2)(i)]

A. The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with Section III.S.1.b of this Title V Operating Permit) is 1 percent or greater of the total operating time for the reporting period; and
B. The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.

iii. Once the Permittee reports an exceedance as defined in Section III.S.1.d.ii of this Title V Operating Permit, ongoing compliance status reports shall be submitted semi-annually until a request to reduce reporting frequency under Section III.S.1.d.iv of this Title V Operating Permit is approved. [40 CFR §63.347(h)(2)(ii)]

iv. The administrator may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source. [40 CFR §63.347(h)(2)(iii)]

v. If the Permittee is required to submit ongoing compliance status reports on a semi-annual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report onsite if all of the following conditions are met: [40 CFR §63.347(h)(3)(i)]

A. For 1 full year (e.g. 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit; [40 CFR §63.347(h)(3)(i)(A)]
B. The Permittee continues to comply with all applicable recordkeeping and monitoring requirements of Subpart A of 40 CFR §63 and 40 CFR §63 Subpart N; [40 CFR §63.347(h)(3)(i)(B)]
C. The Administrator does not object to a reduced reporting frequency for the affected source, as provided in Section III.S.1.d.vi and Section III.S.1.d.vii of this Title V Operating Permit. [40 CFR §63.347(h)(3)(i)(C)]

vi. The frequency of submitting ongoing compliance status reports may be reduced only after the Permittee notified the Administrator in writing of his or her intention to make such a change, and

the Administrator does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Administrator may review information concerning the source's previous performance history during the 5-year record keeping prior to the intended change, or the record keeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and work practice standards. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the Permittee's request to reduce reporting frequency, the Administrator will notify the Permittee in writing within 45 days after receiving notice of the Permitee's intention. The notification from the Administrator to the Permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted. [40 CFR §63.347(h)(3)(ii)]

vii. As soon as the monitoring data required by Section III.S.1.b of this Title V Operating Permit show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the Permittee may again request approval from the Administrator to reduce the reporting frequency as allowed by Section III.S.1.d.vi of this Title V Operating Permit. [40 CFR §63.347(h)(3)(iii)]

Section III: Applicable Requirements and Compliance Demonstration

T. PREMISES-WIDE GENERAL REQUIREMENTS

Table III.T: PREMISES-WIDE GENERAL REQUIREMENTS		
Pollutants or Process Parameters	**Applicable Regulatory References/Citations**	**Compliance Demonstration Requirements**
Annual Emission Statements	RCSA §22a-174-4	The Permittee shall submit annual emission inventory statements requested by the Commissioner as specified in RCSA §22a-174-4(c)(1).
Emergency Episode Procedures	RCSA §22a-174-6	The Permittee shall comply with the procedures for emergency episodes as specified in RCSA §22a-174-6.
Public Availability of Information	RCSA §22a-174-10	The public availability of information shall apply, as specified in RCSA §22a-174-10.
Prohibition Against Concealment/ Circumvention	RCSA §22a-174-11	The Permittee shall comply with the prohibition against concealment or circumvention as specified in RCSA §22a-174-11.
Maximum Monthly VOC Emissions from Miscellaneous Metal Surface Coating Operations	RCSA §22a-174-20(s)	Shall not exceed 1,666 lb/month. <u>Monitoring and Testing Requirements</u> The Permittee shall monitor VOC emissions from all miscellaneous metal surface coating operations to ensure compliance with this requirement. <u>Record Keeping Requirements</u> The Permittee shall maintain a monthly log of all VOC emissions from all miscellaneous metal surface coating operating on premises.
Emission Fees	RCSA §22a-174-26	The Permittee shall pay an emission fee in accordance with RCSA §22a-174-26(d).

Section IV: Compliance Schedule

TABLE IV: COMPLIANCE SCHEDULE				
Emissions Units	**Applicable Regulations**	**Steps Required for Achieving Compliance (Milestones)**	**Date by Which Each Step is to be Completed**	**Dates for Monitoring, Record Keeping, and Reporting**
		Not Applicable		

Section V: State Enforceable Terms and Conditions

Only the Commissioner of the Department of Environmental Protection has the authority to enforce the terms, conditions and limitations contained in this section.

A. This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Environmental Protection or any federal, local or other state agency. Nothing in this Title V Operating Permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

B. Nothing in this Title V Operating Permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the Commissioner.

C. Odors: The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises as set forth in RCSA §22a-174-23.

D. Noise: The Permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA §22a-69-1 through §22a-69-7.4, inclusive.

E. Total Suspended Particulate (TSP): The Permittee shall operate in compliance with the regulations for the control of TSP as set forth in RCSA §22a-174-18.

F. Hazardous Air Pollutants (HAPs): The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.

G. Open Burning: The Permittee is prohibited from conducting open burning, except as may be allowed by CGS Section 22a-174(f).

H. Fuel Sulfur Content: The Permittee shall not use #2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS Section 16a-21a.

Section VI: Permit Shield

NO PERMIT SHIELD IS GRANTED

Section VII: Title V Requirements

The Administrator of the United States Environmental Protection Agency and the Commissioner of Environmental Protection have the authority to enforce the terms and conditions contained in these sections.

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

The date of submission to the Commissioner of any document required by this Title V Operating Permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this Title V Operating Permit, including, but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this Title V Operating Permit, the word "day" means calendar day. Any document or action which is required by this Title V Operating Permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

Any document required to be submitted to the Commissioner under this Title V Operating Permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of the Assistant Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the U. S. Environmental Protection Agency shall be in a computer-readable format and addressed to: Director, Air Compliance Program; Attn: Air Compliance Clerk; Office of Environmental Stewardship; US EPA, Region 1;One Congress Street; Suite 1100 (SEA); Boston, MA 02114-2023.

B. CERTIFICATIONS [RCSA §22a-174-33(b)]

In accordance with RCSA §22a-174-33(b), any report or other document required by this Title V permit and any other information submitted to the Commissioner or Administrator shall be signed by an individual described in RCSA §22a-174-2a(a), or by a duly authorized representative of such individual. Any individual signing any document pursuant to RCSA §22a-174-33(b) shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and shall also sign the following certification as provided in RCSA §22a-174-2a(a)(5):

> "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."

C. SIGNATORY RESPONSIBILITY [RCSA §22a-174-2a(a)]

If an authorization pursuant to RCSA §22a-174-2a(a) is no longer effective because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of RCSA §22a-174-2a(a)(2) shall be submitted to the Commissioner prior to or together with the submission of any applications, reports, forms, compliance certifications, documents or other information which is signed by an individual or a duly authorized representative of such individual pursuant to RCSA §22a-174-2a(a)(2).

D. ADDITIONAL INFORMATION [RCSA §22a-174-33(j)(1)(X)]

The Permittee shall submit additional information in writing, at the Commissioner's request, within thirty (30) days of receipt of notice from the Commissioner or by such other date specified by the Commissioner, whichever is earlier, including information to determine whether cause exists for modifying, revoking, reopening, reissuing, or suspending the permit or to determine compliance with the permit.

In addition, within fifteen (15) days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this Title V Operating Permit or of any change in any information contained in the application, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the changed, corrected, or omitted information to the Commissioner.

E. MONITORING REPORTS [RCSA §22a-174-33(o)(1)]

A Permittee, required to perform monitoring pursuant to this Title V Operating Permit, shall submit to the Commissioner, on forms prescribed by the Commissioner, written monitoring reports on January 30 and July 30 of each year or on a more frequent schedule if specified in such permit. Such monitoring reports shall include the date and description of each deviation from a permit requirement including, but not limited to:

1. Each deviation caused by upset or control equipment deficiencies; and

2. Each deviation of a permit requirement that has been monitored by the monitoring systems required under this Title V Operating Permit, which has occurred since the date of the last monitoring report; and

3. Each deviation caused by a failure of the monitoring system to provide reliable data.

F. PREMISES RECORDS [RCSA §22a-174-33(o)(2)]

Unless otherwise required by this Title V Operating Permit, the Permittee shall make and keep records of all required monitoring data and supporting information for at least five (5) years from the date such data and information were obtained. The Permittee shall make such records available for inspection at the site of the subject source, and shall submit such records to the Commissioner upon request. The following information, in addition to required monitoring data, shall be recorded for each permitted source:

1. The type of monitoring or records used to obtain such data, including record keeping;

2. The date, place, and time of sampling or measurement;

3. The name of the individual who performed the sampling or the measurement and the name of such individual's employer;

4. The date(s) on which analyses of such samples or measurements were performed;

5. The name and address of the entity that performed the analyses;

6. The analytical techniques or methods used for such analyses;

7. The results of such analyses;

8. The operating conditions at the subject source at the time of such sampling or measurement; and

9. All calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by the subject permit.

G. PROGRESS REPORTS [RCSA §22a-174-33(q)(1)]

The Permittee shall, on January 30 and July 30 of each year, or on a more frequent schedule if specified in this Title V Operating Permit, submit to the Commissioner a progress report on forms prescribed by the Commissioner, and certified in accordance with RCSA §22a-174-2a(a)(5). Such report shall describe the Permittee's progress in achieving compliance under the compliance plan schedule contained in this Title V Operating Permit. Such progress report shall:

1. Identify those obligations under the compliance plan schedule in the permit which the Permittee has met, and the dates on which they were met; and

2. Identify those obligations under the compliance plan schedule in this Title V Operating Permit which the Permittee has not timely met, explain why they were not timely met, describe all measures taken or to be taken to meet them and identify the date by which the Permittee expects to meet them.

Any progress report prepared and submitted pursuant to RCSA §22a-174-33(q)(1) shall be simultaneously submitted by the Permittee to the Administrator.

H. COMPLIANCE CERTIFICATIONS [RCSA §22a-174-33(q)(2)]

The Permittee shall, on January 30 of each year, or on a more frequent schedule if specified in this Title V Operating Permit, submit to the Commissioner, a written compliance certification certified in accordance with RCSA §22a-174-2a(a)(5) and which includes the information identified in Title 40 CFR 70.6(c)(5)(iii)(A) to (C), inclusive.

Any compliance certification prepared and submitted pursuant to RCSA §22a-174-33(q)(2) shall be simultaneously submitted by the Permittee to the Administrator.

I. PERMIT DEVIATION NOTIFICATIONS [RCSA §22a-174-33(p)]

Notwithstanding Subsection D of Section VII of this Title V Operating Permit, the Permittee shall notify the Commissioner in writing, on forms prescribed by the Commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

1. For any hazardous air pollutant, no later than twenty-four (24) hours after such deviation commenced; and

2. For any other regulated air pollutant, no later than ten (10) days after such deviation commenced.

J. PERMIT RENEWAL [RCSA §22a-174-33(j)(1)(B)]

All of the terms and conditions of this Title V Operating Permit shall remain in effect until the renewal permit is issued or denied provided that a timely renewal application is filed in accordance with RCSA §22a –174-33(g), -33(h), and –33(i).

Section VII: Title V Requirements

K. OPERATE IN COMPLIANCE [RCSA §22a-174-33(j)(1)(C)]

The Permittee shall operate the source in compliance with the terms of all applicable regulations, the terms of this Title V Operating Permit, and any other applicable provisions of law. In addition, any noncompliance constitutes a violation of the Clean Air Act and Chapter 446c of the Connecticut General Statutes and is grounds for federal and/or state enforcement action, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

L. COMPLIANCE WITH PERMIT [RCSA §22a-174-33(j)(1)(G)]

This Title V Operating Permit shall not be deemed to:

1. Preclude the creation or use of emission reduction credits or the trading of such credits in accordance with RCSA §22a-174-33(j)(1)(I) and §22a-174-33(j)(1)(P), provided that the Commissioner's prior written approval of the creation, use, or trading is obtained;

2. Authorize emissions of an air pollutant so as to exceed levels prohibited under 40 CFR Part 72;

3. Authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or

4. Impose limits on emissions from items or activities specified in RCSA §22a-174-33(g)(3)(A) and (B) unless imposition of such limits is required by an applicable requirement.

M. INSPECTION TO DETERMINE COMPLIANCE [RCSA §22a-174-33(j)(1)(M)]

The Commissioner may, for the purpose of determining compliance with the permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under the permit; to sample or otherwise monitor substances or parameters; and to review and copy relevant records lawfully required to be maintained at such premises in accordance with this Title V Operating Permit. It shall be grounds for permit revocation should entry, inspection, sampling, or monitoring be denied or effectively denied, or if access to and the copying of relevant records is denied or effectively denied.

N. PERMIT AVAILABILITY

The Permittee shall have available at the facility at all times a copy of this Title V Operating Permit.

O. SEVERABILITY CLAUSE [RCSA §22a-174-33(j)(1)(R)]

The provisions of this Title V Operating Permit are severable. If any provision of this Title V Operating Permit or the application of any provision of this Title V Operating Permit to any circumstance is held invalid, the remainder of this Title V Operating Permit and the application of such provision to other circumstances shall not be affected.

P. NEED TO HALT OR REDUCE ACTIVITY [RCSA §22a-174-33(j)(1)(T)]

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Title V Operating Permit.

Section VII: Title V Requirements

Q. PERMIT REQUIREMENTS [RCSA §22a-174-33(j)(1)(V)]

The filing of an application or of a notification of planned changes or anticipated noncompliance does not stay the Permittee's obligation to comply with this Title V Operating Permit.

R. PROPERTY RIGHTS [RCSA §22a-174-33(j)(1)(W)]

This Title V Operating Permit does not convey any property rights or any exclusive privileges. This Title V Operating Permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including Section 4-181a(b) of the Connecticut General Statutes and RCSA §22a-3a-5(b). This Title V Operating Permit shall neither create nor affect any rights of persons who are not parties to this Title V Operating Permit.

S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA §22a-174-33(o)(3)]

The Permittee shall, contemporaneously with making a change authorized by this Title V Operating Permit from one alternative operating scenario to another, maintain a record at the premises indicating when changes are made from one operating scenario to another and shall maintain a record of the current alternative operating scenario.

T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA §22a-174-33(r)(2)]

The Permittee may engage in any action allowed by the Administrator in accordance with 40 CFR 70.4(b)(12)(i) to (iii)(B) inclusive, and 40 CFR 70.4(b)(14)(i) to (iv), inclusive without a Title V non-minor permit modification, minor permit modification or revision and without requesting a Title V non-minor permit modification, minor permit modification or revision provided such action does not:

1. Constitute a modification under 40 CFR 60, 61 or 63,

2. Exceed emissions allowable under the subject permit,

3. Constitute an action which would subject the Permittee to any standard or other requirement pursuant to 40 CFR 72 to 78, inclusive, or

4. Constitute a non-minor permit modification pursuant to RCSA §22a-174-2a(d)(4).

At least seven (7) days before initiating an action specified in RCSA §22a-174-33(r)(2)(A), the Permittee shall notify the Administrator and the Commissioner in writing of such intended action.

U. INFORMATION FOR NOTIFICATION [RCSA §22a-174-33(r)(2)(A)]

Written notification required under RCSA §22a-174-33(r)(2)(A) shall include a description of each change to be made, the date on which such change will occur, any change in emissions that may occur as a result of such change, any Title V permit terms and conditions that may be affected by such change, and any applicable requirement that would apply as a result of such change. The Permittee shall thereafter maintain a copy of such notice with the Title V permit. The Commissioner and the Permittee shall each attach a copy of such notice to their copy of the permit.

Section VII: Title V Requirements

V. TRANSFERS [RCSA §22a-174-2a(g)]

No person other than the Permittee shall act or refrain from acting under the authority of this Title V Operating Permit unless this Title V Operating Permit has been transferred to another person in accordance with RCSA §22a-174-2a(g).

The proposed transferor and transferee of a permit shall submit to the Commissioner a request for a permit transfer on a form provided by the Commissioner. A request for a permit transfer shall be accompanied by any fees required by any applicable provision of the general statutes or regulations adopted thereunder. The Commissioner may also require the proposed transferee to submit with any such request, the information identified in CGS Section 22a-6m.

W. REVOCATION [RCSA §22a-174-2a(h)]

The Commissioner may revoke this Title V Operating Permit on his own initiative or on the request of the Permittee or any other person, in accordance with Section 4-182(c) of the Connecticut General Statutes, RCSA §22a-3a-5(d), and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The Permittee requesting revocation of this Title V Operating Permit shall state the requested date of revocation and provide the Commissioner with satisfactory evidence that the emissions authorized by this Title V Operating Permit have been permanently eliminated.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this Title V Operating Permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this Title V Operating Permit if the Administrator has determined that the Commissioner failed to act in a timely manner on a permit renewal application.

This Title V Operating Permit may be modified, revoked, reopened, reissued, or suspended by the Commissioner, or the Administrator in accordance with RCSA §22a-174-33(r), Connecticut General Statutes Section 22a-174c, or RCSA §22a-3a-5(d).

X. REOPENING FOR CAUSE [RCSA §22a-174-33(s)]

This Title V Operating Permit may be reopened by the Commissioner, or the Administrator in accordance with RCSA §22a-174-33(s).

Y. CREDIBLE EVIDENCE

Notwithstanding any other provision of this Title V Operating Permit, for the purpose of determining compliance or establishing whether a Permittee has violated or is in violation of any permit condition, nothing in this Title V Operating Permit shall preclude the use, including the exclusive use, of any credible evidence or information.